Picture Report: Reading Upgrades Bridges

August 5, 1957

RAILWAY AGE *weekly*

Men Who Build the Future of American Railroads

"Continued progress is the keynote of modern railway transportation. Nothing in recent railroad history has had a more profound effect than the development of more efficient locomotive power. The General Motors Diesel has meant longer and heavier trains . . . greater serviceability . . . better performance. Intense competition and rising costs make it imperative that we take advantage of every technical advance that science makes possible. In this way we not only assure our customers of better service but also insure that tomorrow's railroad will be a smoother, tougher, more powerful instrument of transportation."

CLARK HUNGERFORD, President,
St. Louis-San Francisco Railway Company

Electro-Motive and the Frisco have enjoyed a long mutually-rewarding relationship. In addition to the purchase of new Diesels, the Frisco has had the foresight to embark on a Diesel modernization program, thus anticipating the enlarged demands of the future.

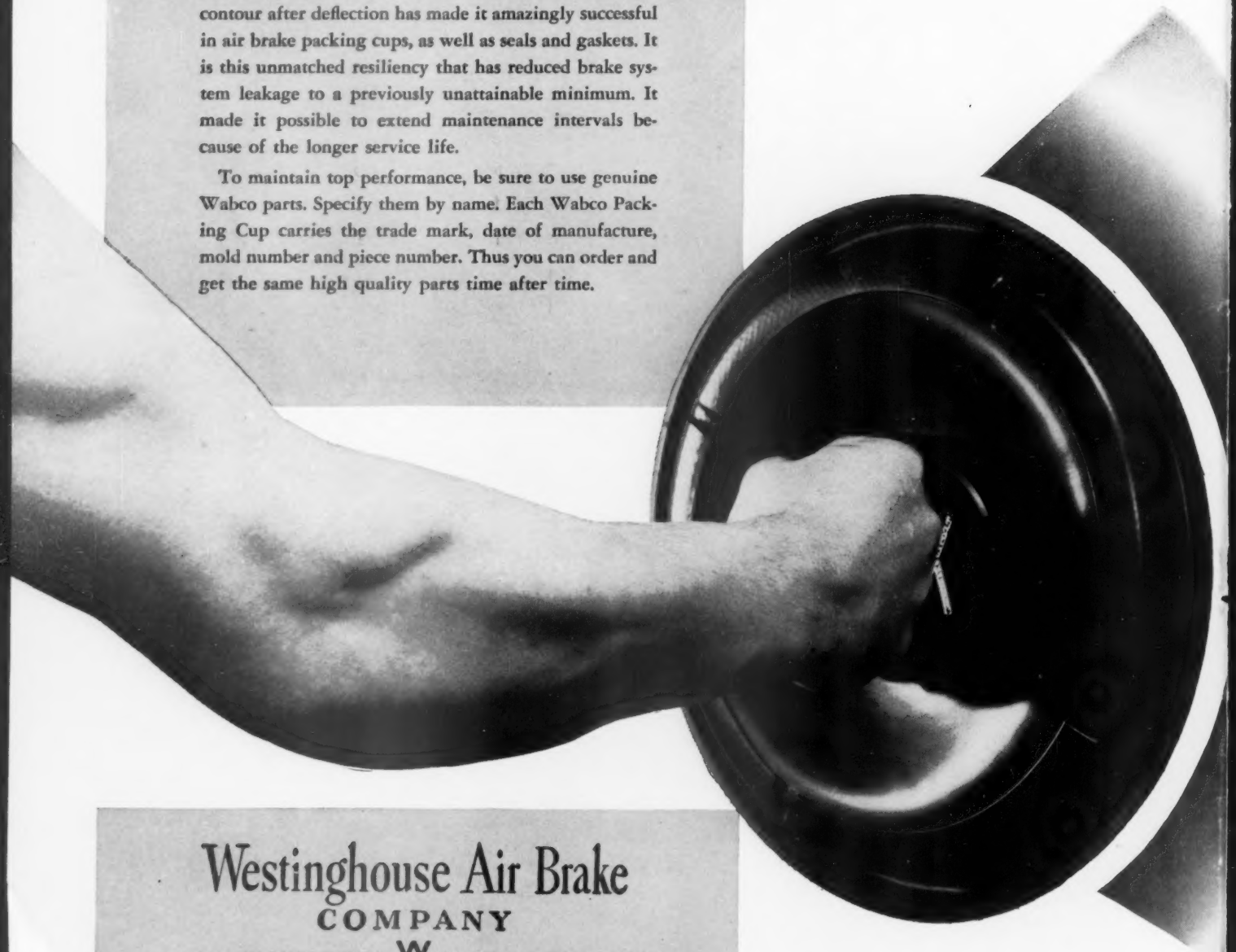
ELECTRO-MOTIVE DIVISION · GENERAL MOTORS
LA GRANGE, ILLINOIS • *Home of the Diesel Locomotive*
In Canada: General Motors Diesel Ltd., London, Ontario

WABCO®

takes the punch and bounces back

Wabco's ability to bounce back and regain its original contour after deflection has made it amazingly successful in air brake packing cups, as well as seals and gaskets. It is this unmatched resiliency that has reduced brake system leakage to a previously unattainable minimum. It made it possible to extend maintenance intervals because of the longer service life.

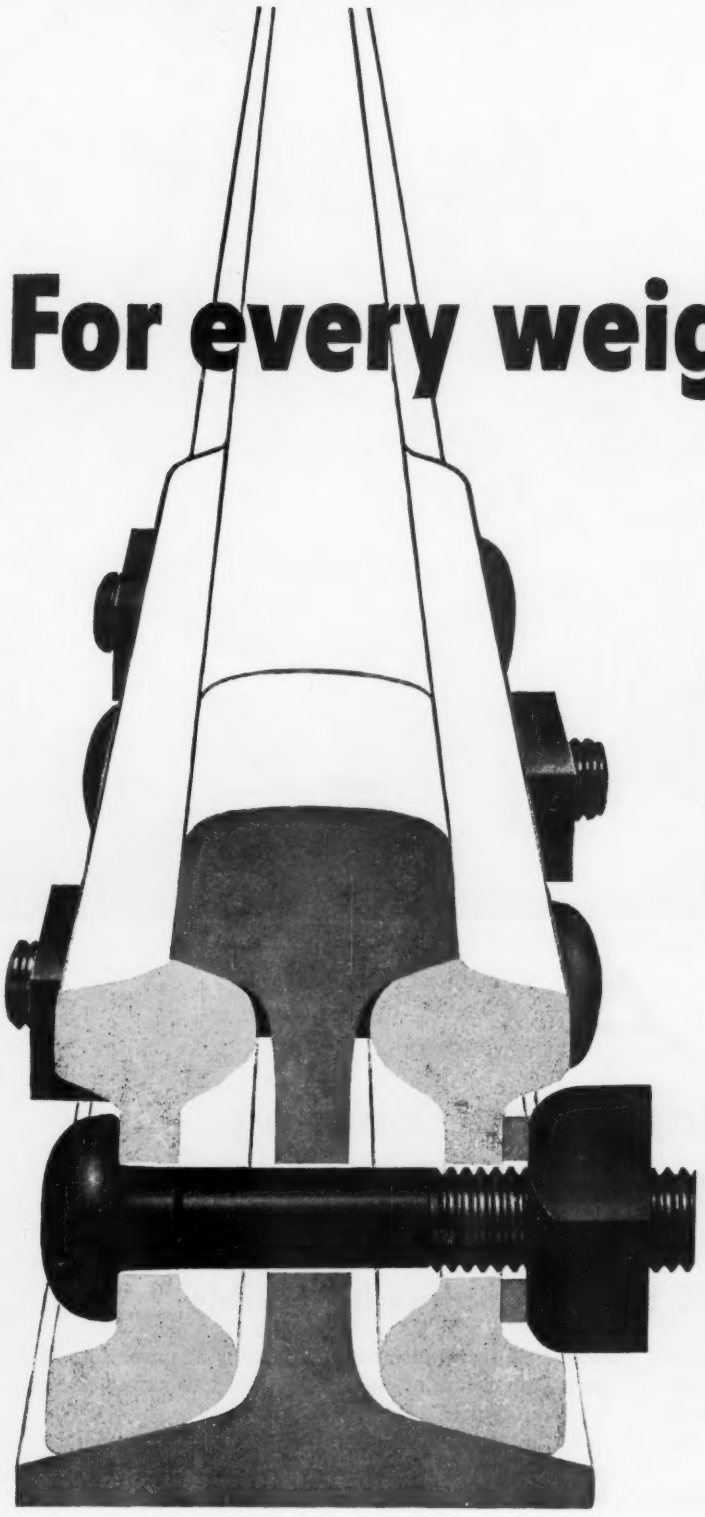
To maintain top performance, be sure to use genuine Wabco parts. Specify them by name. Each Wabco Packing Cup carries the trade mark, date of manufacture, mold number and piece number. Thus you can order and get the same high quality parts time after time.



Westinghouse Air Brake
COMPANY
AIR BRAKE DIVISION WILMERDING, PENNA.

WABCO Dated Packing Cups

For every weight of rail



Bethlehem track bolts are made in sizes to meet every main line and secondary requirement. They're good, sound bolts, too. They are furnished with strong oval necks and rolled threads, and have well-formed square nuts for firm wrench-grip. Drop a line to us about your requirements.

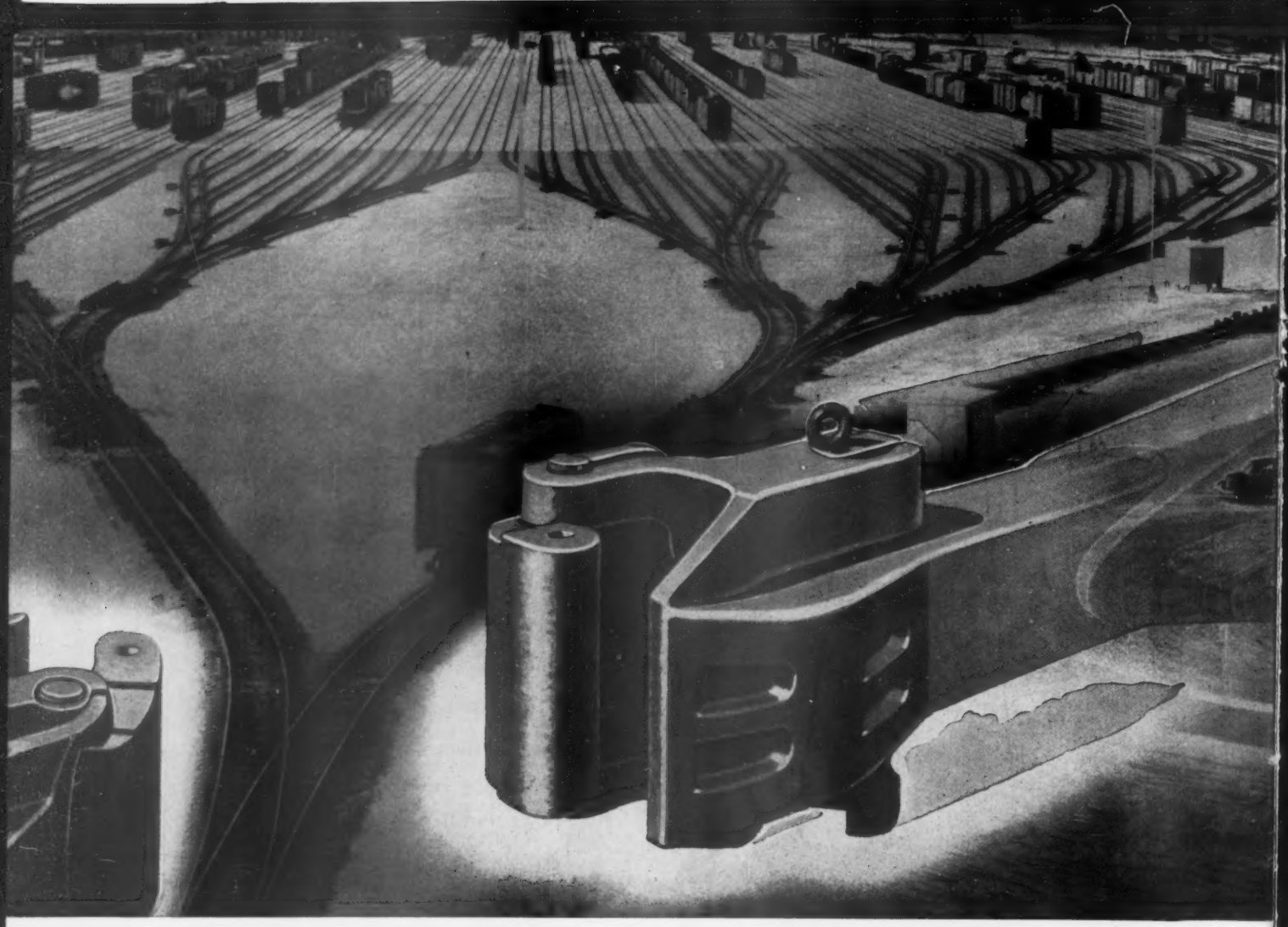
BETHLEHEM STEEL COMPANY
BETHLEHEM, PA

On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation. *Export Distributor.* Bethlehem Steel Export Corporation

BETHLEHEM STEEL

Bethlehem supplies every type of Railroad Fastener

5–57



VELAC*

means Damage-Free Coupling in classification yards

Here's how the VELAC System makes it possible

THE elimination of impact damage was a major objective in the development of the VELAC *Fully-Automatic* Classification Yard System. Semi-Automatic yards speeded car classification but only partially solved the damage problem.

With the VELAC System, chances for errors in judging retarder leaving speeds have been practically eliminated. Automatic sensing devices measure car weight, speed, tangent track rolling resistance, curved track rolling resistance and track fullness. This information is instantly evaluated in an electronic computer in order to release each cut of cars at the proper speed to assure damage-free coupling.

From an economic standpoint, the savings made possible by faster classification and the reduction in damage costs quickly pay for the installation of a fully-automatic VELAC System and promote future profits.

*Trademark

Quality First . . . TO LAST

UNION SWITCH & SIGNAL
DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY
SWISSVALE, PENNSYLVANIA

NEW YORK . . . . . PITTSBURGH . . . . . CHICAGO . . . . . SAN FRANCISCO

RAILWAY AGE *weekly* August 5, 1957 • Vol. 143, No. 6

Week at a Glance

Departments

Current Publications	40
Current Questions	16
Facts & Figures	41
Financial	41
Freight Car Loadings	45
Letters from Readers	49
New Equipment	45
Organizations	41
People in the News	42
Railroading After Hours	22
Railway Market	45
Supply Trade	51
Technical Tidings	41
The Action Page	52
What's News in Products	39

Editorial and Executive Offices

• New York 7, 30 Church St.

JAMES G. LYNE, Editor
ROBERT G. LEWIS, Publisher

Executive Editor ..... Joe W. Kizzia
Managing Editor ..... C. B. Tavenner
News & Financial Editor .. Fred C. Miles
Traffic-Transportation ... G. C. Hudson
Mechanical ..... H. C. Wilcox
F. N. Houser, Jr.
Electrical ..... A. G. Oehler
Signaling & Communications
John H. Dunn Robert W. McKnight
Regional News ..... Robert B. Keane
Presentation ..... Franklin Ryan
Librarian ..... Edith C. Stone
Editorial Assistants
Ann Ortlinghaus June Meyer
Art Director ..... Russell F. Rypsam

• Chicago 3, 79 West Monroe St.

Editor Emeritus ..... Samuel O. Dunn
Western Editor .... Wallace W. Abbey
Traffic-Transportation .. T. H. Desnoyers
Mechanical ..... Norman E. Gillespie
Engineering ..... M. H. Dick
R. E. Dove R. M. Schmidl
Regional News ..... Augustus D. Welty
Editorial Assistant ..... Wanda Brown

• Washington 4, National Press Bldg.

Washington Editor ..... Walter J. Taft

Railway Age, established in 1856, is indexed by the Industrial Arts Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.

Published weekly by the Simmons-Boardman Publishing Corporation at Orange, Conn., and entered as second class matter at Orange, Conn. James G. Lyne, president. Arthur J. McGinnis, executive vice-president and treasurer. F. A. Clark, vice-president and secretary.

Faricy sees earnings key to future car supply ..... p. 9

Big question facing railroads is where the money will come from to maintain buying programs. Elevated to AAR chairmanship, he introduces his successor as president, Daniel P. Loomis.

Car-lease plan reaction runs gamut p.13

Split between critics and proponents is on lines of whether federal agency equipment-leasing setup would accelerate or stem drift to government control.

New mining technology stimulates coal-fired turbine study p.20

Modern techniques in getting the coal, and post-mining processing give new impetus to experiments.

Test pairs container with 'Clejan' car p.23

Innovation in rampless piggyback loading uses truck-container unit specially rigged to work with lightweight TOFC car.

This CTC saves time two ways p.25

Completion of a 124-mile control section saves two hours running time for freight trains while giving the Santa Fe needed track capacity.

PICTURE REPORT: How the Reading upgrades bridges p.31

To get maximum use of a belt line skirting Reading, Pa., this road had to up the rating of four 50-plus year old bridges. Here's how four modern spans were erected.

The Action Page—Make Uncle Sam a Partner? p.52

The eastern roads' equipment-leasing plan is an expedient—but it's no disgrace. Chronic car shortage ailments must be cured. Opponents of this prescription should offer an alternative remedy.

Short and Significant

Frisco will accept conditions . . .

attached by ICC's Division 4 to its approval of that road's acquisition of Central of Georgia. It has so advised the commission. In addition to the usual ones for protection of employees and maintenance of existing routes, the conditions will require that Frisco offer to purchase Central stock held by minority interests. Close of the case awaits commission disposition of expected appeals from its division's ruling.

remember her?

You most likely saw her. She appeared in our advertisements in magazines from coast to coast. We called her a "born train traveler!"

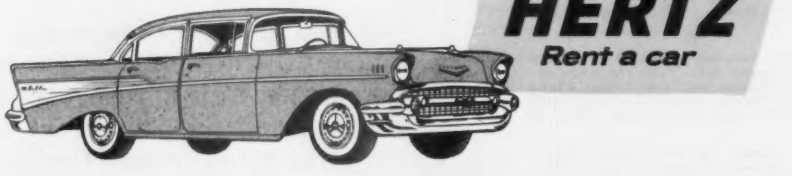
We said her folks avoid the endless miles of highway travel by leaving their family car at home, taking a fast and comfortable train, then renting a bright, new Powerglide Chevrolet Bel Air or other fine Hertz car at their destination.

That's The Hertz Idea. Now—what's it mean for you?

In two words, *more passengers.* By encouraging people to go by train, we are of course promoting the idea of renting a car. And once your passengers have tried the Hertz Rail-Auto Travel Plan, they'll use it again and again. That means *repeat business* for both of us!

We also offer your ticket agents a 10% commission on the total rental fee of any Hertz car they reserve for a railroad passenger. And—with Hertz counters or direct "Call a Car" phones in terminals, we can work even more closely.

That's why we say—let's work together. Mention the idea of renting a car in your advertising. For free promotional materials write: Hertz Rent A Car, 218 South Wabash Avenue, Chicago 4, Illinois.



Week at a Glance CONT.

Current Statistics

Operating revenues, six months	
1957	$5,233,825,887
1956	5,236,344,953
Operating expenses, six months	
1957	$4,110,382,398
1956	4,037,305,569
Taxes, six months	
1957	$541,759,233
1956	558,823,136
Net railway operating income, six months	
1957	$450,303,531
1956	511,593,738
Net income estimated, six months	
1957	$345,000,000
1956	404,000,000
Average price 20 railroad stocks	
July 30, 1957	93.29
July 31, 1956	105.31
Carloadings revenue freight	
Twenty-nine weeks, 1957	19,812,194
Twenty-nine weeks, 1956	20,675,823
Average daily freight car surplus	
Wk. ended July 27, 1957	14,393
Wk. ended July 28, 1956	22,723
Average daily freight car shortage	
Wk. ended July 27, 1957	1,573
Wk. ended July 28, 1956	4,489
Freight cars on order	
July 1, 1957	91,810
July 1, 1956	129,409
Freight cars delivered	
Six months, 1957	51,411
Six months, 1956	33,189

•

Advertising Sales Department

Duane C. Salisbury, vice-president, director of sales
New York 7, N.Y., 30 Church st., WO-4-3060
J. S. Vreeland, vice-president, F. T. Baker, W. E. Glasby, J. C. Lyddy
Chicago 3, Ill., 79 W. Monroe st., RA-6-0794
J. R. Thompson, vice-president, J. W. Crossett, J. D. Dolan, W. J. Catenby
Cleveland 13, Ohio, Terminal Tower, MA-1-4455, H. H. Melville, vice-president
C. J. Fisher, H. M. Blunt
Atlanta 9, Ga., 22 Eighth st., N.E., J. S. Crane
Dallas 19, Tex., 3908 Lemmon ave., Lakeside 2322, Joseph Sanders
Los Angeles 17, Cal., 1151 W. Sixth st., MA-6-0553, Fred Klaner, Jr., B. J. Erickson
Portland 5, Ore., 1220 S.W. Morrison, CA-7-4993, L. B. Conaway
San Francisco 4, Cal., 244 California st., GA-1-7004, Lewis Vogler
London E. C., 1 Eng., 103 Newgate st., Sibley-Field Publishing Co., Ltd.
Frankfort am Main (16), West Germany, Wittelsbacher Allee 60
Georg J. Linder
Continental European Representative

•

Subscription to railroad employees only in U.S. possessions, Canada and Mexico, $4 one year, $6 two years, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year, in other countries, $15 a year. Single copies 50c, except special issues. Concerning subscriptions write R. C. Van Ness, Circulation Director, 30 Church st., New York 7

Labor's case in the CPR-BLFE dispute . . .

was concluded at Ottawa recently. The Royal Commission conducting hearings on the Canadian Pacific move to eliminate firemen from diesel yard and freight cabs made an extensive tour of Canadian installations in western Canada in July. It will soon go to Europe to inspect operations there. Rail rebuttal testimony is scheduled for October, to be followed by closing arguments.

Costs soaring, net sinking . . .

Sounds like a railroad report. It's not. It's the theme stressed by domestic airlines in presentations to the Civil Aeronautics Board as they sought to boost air fares about six per cent. Ability to expand and modernize depends, the CAB was told, on adequate earnings.

A new excuse for procrastination . . .

has been conjured up by the New Jersey Public Utilities Commission. It turns down applications of several roads for authority to trim commutation services in the New York area, without any decision as to convenience and necessity, because a non-binding resolution of the state legislature expresses its intent to maintain the commutation status quo until the Metropolitan Transit Commission makes its year-end report.

Mediation efforts with the Dispatchers . . .

are to be resumed August 7 at Chicago, a union spokesman said last week. Contract talks were temporarily suspended while labor representatives reported back to the membership on the status of negotiations with the nation's major railroads.

Electronic mail handling system . . .

is to be installed by the Pennsylvania at 30th street station in Philadelphia. It is expected to be in service by the year's end.

State with largest number of railroad employees . . .

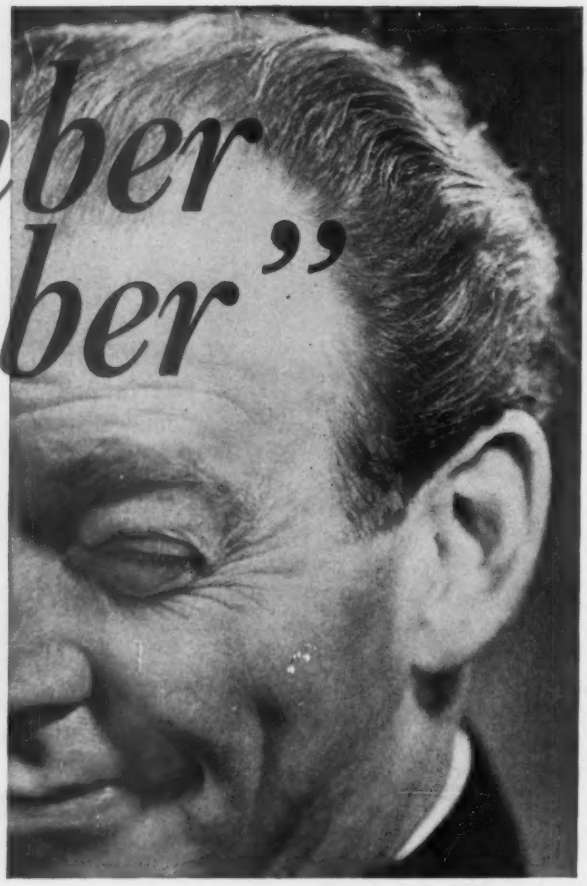
is Illinois, says the AAR's Bureau of Railway Economics. Class I roads and switching and terminal companies in that state employ 104,000 persons, of whom 61,660 are in metropolitan Chicago. Pennsylvania ranks second in number of railroad workers, with 101,950, of whom 19,450 are employed in Pittsburgh and 18,735 in Philadelphia. Next comes New York state, with 76,440 railroad employees, of whom 30,000 are in New York City.

L&N mechanizes track work . . .

"Assembly line" track maintenance was started July 9 on the road's Cincinnati Division. Track renewal and re-surfacing crew was equipped with eight pieces of mechanized equipment, costing about $125,000, with which L&N expects crew to work approximately one mile of track per eight-hour day. "Assembly line" method will probably be expanded to include the road's other seven operating divisions.

progressive mechanical men are saying:

"remember september"

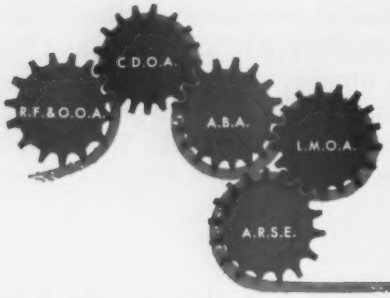


...password to the most important meeting of the year

CHICAGO
HOTEL SHERMAN
SEPT. 15·16·17·18·19

THIS YEAR... *more new* developments and technical advances *than ever* before! Be sure to attend the "idea clinic".

All the newest information, *all* in one place, *all* at one time! *ALL* FIVE MEET AT THE SHERMAN! 4 Mechanical Department Conventions, 1 Allied Railway Supply Exhibit.



AIR BRAKE ASSOCIATION
CAR DEPARTMENT OFFICERS' ASSOCIATION
LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION

RAILROADS ARE MOVING FORWARD— STAY WITH THEM!

RAILWAY FUEL & OPERATING OFFICERS' ASSOCIATION
THE ALLIED RAILWAY SUPPLY EXHIBIT

RAILWAY AGE
The Industry's Newsweekly

Earnings Key to Future Car Supply

Faricy stresses need for better rate of return as he assumes chairmanship of AAR and introduces President Loomis to Washington correspondents—Sees another general rate rise possible

Future freight car supply depends upon a higher rate of return for the railroad industry, Chairman William T. Faricy of the Association of American Railroads said last week.

He spoke at a Washington news conference where he introduced Daniel P. Loomis, his successor in the AAR presidency. As Mr. Faricy explained, the new executive setup will prevail until April 1, 1958, when he will retire as he planned for "over a decade."

The office of chairman will end at that time and Mr. Loomis will become the association's chief executive officer, as well as chief administrative officer, which is his present role.

The car-supply situation is one of the problems on which Mr. Faricy will concentrate during the remaining months of his service. He pointed out that "some progress" has been made in that the two-year net gain will amount to about 50,000 cars by the end of this year. At the same time, he recognized that there will have to be further net gains totaling 100,000 cars before the supply problem is solved.

The "big problem" will come next year, Mr. Faricy added, as he got into the earnings situation. It will be the "big question" of where the money will come from to keep up the necessary backlog of firm orders. He is concerned that earnings are "not holding up too well while we wait for the rate case (Ex Parte 206) to be decided."

Asked if a return of 6% were in sight, Mr. Faricy replied that much will depend on what the ICC decision authorizes. He noted that 6% is a "long ways" from the 3.95% earned last year; but he went on to insist that the railroads are "clearly entitled" to 6%. He thinks they may have to come up to it "by degrees" but he also believes it should continue to be the return the railroads are "shooting at."

Thus, Mr. Faricy conceded it to be "entirely possible" that Ex Parte 206 "is not by any means the last general rate case." He explained that the railroads might have to go back to the commission if costs keep going up. He referred to the recent increase in steel prices and the wage settlements with their escalator clauses and the additional 7-cents-per-hour increase which will become effective November 1.

Mr. Faricy's further comment on the rate outlook included a reference to regional studies which might eventually involve more selective approaches than the general-increase plan. He anticipated, however, that such studies will take time.

Asked to comment on the railroad industry's responsibility to heed President Eisenhower's call for cooperation to avoid inflation, Mr. Faricy identified the carriers as "victims of inflation." Their first responsibility, he added, is to get their earnings up to a point where they can perform their proper role in the nation's economy of peacetime or war.

He insisted that this is not counter to the President's request. Only industries which are making adequate returns can

PROPHETIC PHOTO taken outside White House during railroad strike crisis in 1946 set up AAR line of succession. From left to right, late John J. Pelley, then AAR president, William T. Faricy, his successor, and Daniel P. Loomis, who now succeeds Mr. Faricy, are shown after conference with President Harry S. Truman.

afford to forego price increases as their costs rise, he added.

As to the eastern railroads' proposal that a federal agency be established to acquire railroad rolling stock for lease to the carriers, Mr. Faricy pointed out that this was not an AAR recommendation. At the same time, he emphasized that it is not opposed by the railroads which did not become members of the sponsoring group (Railway Age, July 29, p. 7).

Except for responses to questions addressed to him, Mr. Loomis let Mr. Faricy do most of the talking at the news conference. As he put it, he preferred to keep quiet "until I get my feet under the table" and "learn from Mr. Faricy."

He did say, however, that he is a strong believer in the proposition that railroads still have an important place in the country's transportation system, and he is optimistic as to the industry's future. He added that the railroads "certainly intend to make every effort to hold their own" as the economy of the country rises. Moreover, he is confident that they will improve their relative position by facing their problems and solving them.

Asked if the AAR would hereafter deal with labor matters in view of his experience along that line, Mr. Loomis replied that any such change would be a matter of policy—up to the association's board. He added that he knew of no proposal to change the present plan of regional handling.

Commenting on prospects for relief from "make work" rules and so-called "featherbedding" practices, Mr. Loomis said "some progress" has been made—"not too much," but nevertheless "substantial" in view of the problem. He explained that there has been "a nibbling at obsolete rules," and that the matter is receiving "much attention and sympathy" from employees and management.

Explaining the reason for the new executive setup, Mr. Faricy said it was designed to effect a smooth transition at the time of his retirement. He also saw other advantages, including the opportunity it will afford him to concentrate on matters requiring special attention at this time. One of these is the car supply problem; others are the further development of the AAR research program, and his job as chairman of the United States delegation to the forthcoming Pan American Railway Congress at Buenos Aires beginning August 30.

As to the research program, Mr. Faricy recalled that the AAR had no research facilities of its own 10 years ago.

Present facilities include three buildings at the Illinois Institute of Technology. Others are planned, but there is still a lot to be done in developing the program, Mr. Faricy said, adding that opportunities for savings as a result of research are "limitless."

The AAR chairman was also asked if the railroad industry has any plans for another radio program—or a television program. He replied that sponsorship of a television program has been under "consideration" for some time, the main problem being choice of the "right kind of program."

If the "right kind of program" could be arranged, Mr. Faricy's idea would be to "go for it." He said that many television programs have been looked at, but "they didn't seem to fit. If we have TV," he added, "we ought to have the best there is. For that, we would have to increase our budget, but I think it would be worth it if we got the right kind of program."

Loomis Gets Potent Role in RR Growth

"Dan" Loomis comes to the AAR at a time when important changes in its functions may be in the offing. Such changes would be, at least in part, the result of the study made by management consultants Robert S. Heller & Associates.

Railroad circles have buzzed for months over what some of the new developments might be. The Heller report is before the AAR board now but perhaps the only concrete outcome of the analysis to date has been the formulation of a legislative department—and even this had been recommended previously.

In addition to the action on the Faricy-Loomis posts, the AAR member roads and board of directors also:

Elected Erie President Harry W. Von Willer and Atlantic Coast Line President W. Thomas Rice to the association board. They succeed Paul W. Johnston, now Erie chairman, and Champion M. Davis, recently retired ACL president, both of whom have resigned AAR board membership.

Elected Stanley J. Strong, assistant secretary-treasurer of the AAR, to succeed Secretary-Treasurer George M. Campbell who will retire September 1. At that time, Richard E. Keefer, secretary of the AAR finance, accounting, taxation and valuation department, will become assistant secretary-treasurer.

Mr. Loomis' successor as AWR president may be C. M. Roddewig, president of the Chicago & Eastern Illinois.

It is reliably reported that the post has been offered to him but his decision was not expected for several days as Railway Age went to press.

It's likely, too, that the labor committee work to which Mr. Loomis devoted a large part of his time, will be handled separately under a proposed new setup of the AWR. A separate appointment is expected to be made soon for this AWR activity.

Mr. Faricy's years at the AAR's helm were not uneventful, and he and the railroad officers who served with him in the past decade were witnesses to and part of important events in American railroading.

For one thing, the soft-spoken lawyer from St. Paul moved to Washington from the post of vice-president and general counsel on the Chicago & North Western just as the railroads entered the crucial stages of the immediate postwar period. It was a time for readjustment in April 1947, particularly in the field of economics, as freight rates had to be brought in line with steepening wage demands.

It was also the time of the partial estrangement of the C&O from the association and the formation of the Federation for Railway Progress under the sponsorship of Robert R. Young. Called upon early in his administration to rebut some

(Continued on page 13)

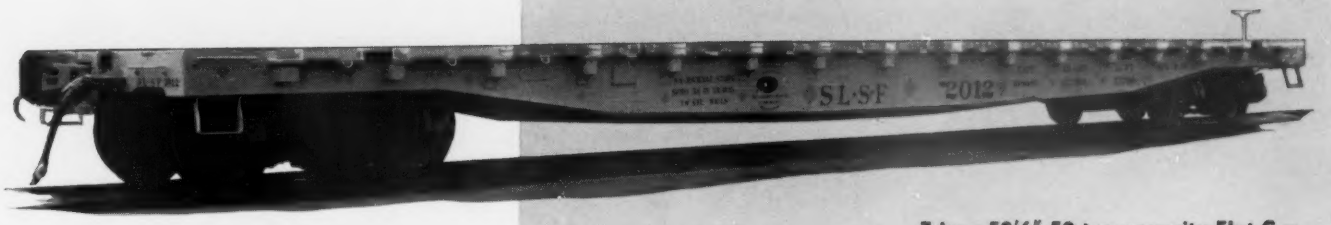
H. L. Hamilton

R. M. Dilworth

E.W. Kettering

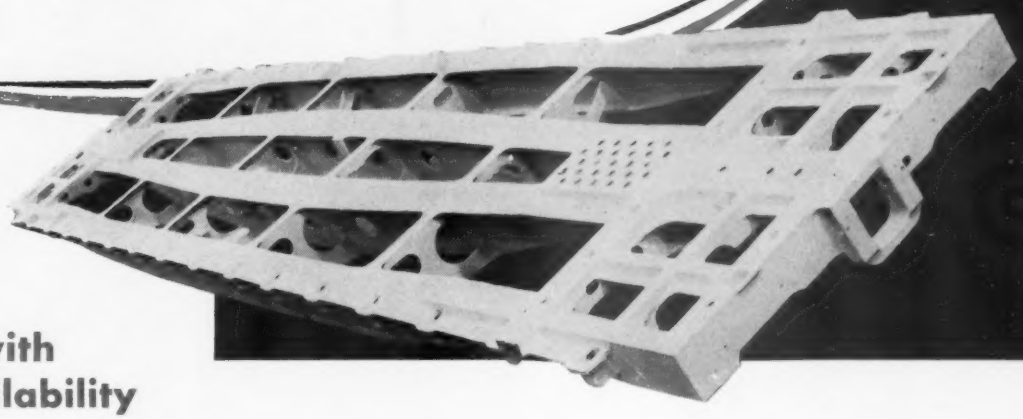
Diesel 'Pioneers' Honored with Sperry Award

The 1957 Elmer A. Sperry Award to be presented at the October meeting of the American Institute of Electrical Engineers will honor two retired and one active executive of Electro-Motive Division, General Motors Corp. The award is a tribute to Mr. Sperry's achievements in many phases of transportation. The 1957 recipients are H. L. Hamilton, retired GM vice-president who founded EMD; R.M. Dilworth, EMD chief engineer from 1926 to 1948; and E. W. Kettering, now EMD director of research who was in direct charge of development of GM 567 diesel.



Frisco 53'6" 50-ton capacity Flat Car

You'll realize more from your investments in new flat cars when built with Commonwealth One-Piece Underframes



- **longer life with greater availability**
- **underframes are maintenance-free**
- **safer shipping for heavier loads**

The St. Louis-San Francisco Railway, like many other railroads, makes repeated investments in Commonwealth cast steel one-piece underframes for flat cars, because they have *proved themselves profitable* in over 20 years of service.

These underframes provide greatest strength at minimum weight, and enable each car to bring in maximum revenue through greater availability, longer life and lowest maintenance cost. The low height from rail to top of decking permits higher freight loads, and the exceptional load-carrying capacity of these underframes means safer shipping for heavier loads.

The profitable performance of Commonwealth Underframes over many years is written in the ledgers of many railroads. For sound economy, invest in Commonwealth Underframes for *your* flat cars.

GENERAL STEEL CASTINGS

GEARED TO PROGRESS
P R I
MEMBER

GRANITE CITY, ILL. • EDDYSTONE, PA. • AVONMORE, PA.

Check list for a customer: to measure the value of supplier delivery

Do you remember the Summer of 1956?

We do too!

Last summer we handled steel so hot it actually scorched timbers in the car. It came into our plant as red hot steel and left as Steel Ends . . . delivered on time. On one occasion, we received steel and shipped finished Ends, made from that *same* steel, in the *same railroad car* . . . delivered on time.

The Summer of 1956 is a good index to the value of a supplier's responsibility of "delivery". A responsibility that includes the same attention to parts and small orders as that given to large orders. A responsibility for on-time delivery at all times.

How important is delivery?

Your experience tells you a supplier has no greater responsibility.

STANDARD RAILWAY EQUIPMENT MANUFACTURING COMPANY

General Office: 4527 Columbia Ave., Hammond, Ind. • New York • Chicago • St. Paul • San Francisco

Standard Railway Equipment Manufacturing Company, (Canada) Ltd. Sun Life Building, Montreal

of the FRP group charges, Mr. Faricy declared he wasn't spoiling for a fight—but warned that he wouldn't run from one either.

Eventually a reconciliation was effected, the C&O returned to the fold, and Mr. Young and his associates joined in support of the association.

Other significant developments during the Faricy regime were the formulation of the Cabinet Report on Transport Policy & Organization from which the "three shall not" bills were drawn, and the near-record car-buying effort of the railroads at the end of 1955 in answer to pleas from Mr. Faricy and others for action to meet the car shortage situation aggressively.

It is noteworthy that one of the key roles played by Mr. Faricy before accepting the AAR reins was as chief counsel for the Class I roads in the Carriers Conference Committee during the labor crises of 1945-1946. For it is in this field of railroad labor negotiation that Mr. Faricy's successor has won much of his prestige. Moreover, he worked close to Mr. Faricy in many of the dealings with the brotherhoods in the postwar disputes.

Mr. Loomis has earned a reputation in this extremely difficult, often trying job of labor negotiation as a firm but fair negotiator who refuses to "bait" labor representatives. Outspokenly favorable to compulsory arbitration in serious disputes, he also has firm convictions on such issues as wage policies and the union shop.

At 52 years of age—two years younger than Mr. Faricy was when he moved into the AAR president's office in the Transportation Building close by the White House—Mr. Loomis bridges in his railroad experience the sometimes considerable gap between eastern and western railroad thought. A Vermonter with degrees from Union College and Harvard Law School, he spent 14 years in the law department of the Delaware & Hudson, rising to assistant general counsel before going west in 1942.

In that year he became executive director of the Association of Western Railways at Chicago. With consolidation of western associations in 1948, he became chairman of an expanded AWR with additional legal and public relations functions.

Similarly, Mr. Faricy's railroad career started in the law department of the Chicago, St. Paul, Minneapolis & Omaha in 1914 after he had taken degrees from St. Thomas College and the St. Paul College of Law. In 1925 he went with the parent Chicago & North Western as commerce attorney, returning to the Omaha in 1929. He returned to the CNW in 1933, to become system general counsel in 1942 and a vice-president in 1944.

Car-Lease Plan Reaction Runs Gamut

Advocates see railroads certain to benefit; Opponents fear further federal intrusion; Official comment guarded or nil

Reaction to the proposal to have a government agency purchase rolling stock for lease to the railroads ranged last week from caution to confusion, from enthusiasm to disappointment.

The plan was presented to Congress by Pennsylvania President James M. Symes and would be something like the Equitable Life Assurance Society arrangement made available several years ago.

One railroad supplier executive said that in his personal opinion, the plan is a "good thing" and added that he thought it certainly would help the railroads solve their car supply problems.

However, there was a noticeable reluctance on the part of the railroad supply industry to endorse (or to reject) the plan unequivocally.

Such caution may stem from a lack of unanimity among the railroads themselves. With some roads in the east luke-warm at best, those in the west and south figured to remain aloof. Mr. Symes made it clear in his Washington presentation that he spoke for eastern railroads only. One report is that there has been a tacit understanding reached between the proponents of the plan and the roads in the west and south that the latter, while they may not endorse, at least will not attack it publicly. They are to remain "neutral."

"Rail Cars for Progress and Defense" is the official title of the plan which Mr. Symes said is a "simple and practical answer" to the problem of how the railroads are going to meet the challenges of the future.

In need of twice or three times as much equipment in the next decade as they have purchased in the last 10 years, Mr. Symes stated, the railroads just don't have the necessary resources. He told reporters that some $1.2 billion was needed—too much for private enterprise to handle.

The private enterprise issue is raised time and again by persons willing to discuss the plan.

Many express fears that involving the government in car procurement operations will eventually lead to further federal intrusion. Mr. Symes rejected such suggestions, thinking that actually the plan would help to forestall government ownership.

A Wall Street expert on railroad financial matters differed with the PRR chief on this, however. The plan, he said, is a "poor substitute for adequate earnings and a modern transport policy."

Pressed as to how the railroads might obtain "adequate earnings," he pictured the solution as being an "enlightened transport policy." Without such a policy, which he sees held back by retrogressive

New WP Train Ferry All Decked Out for Debut

Dressed up like a cruise queen, Western Pacific's new train ferry "Las Plumas" is shown as she steamed into San Francisco Bay for traditional greeting of fireboat geysers and tooting whistles. Ferry, which cost $1,300,000 and will handle 28 freight cars, replaces two steam tugs and car floats in Oakland-San Francisco service. Passenger cars seen at stern of ferry housed crew coming from Portland.

'Diesel-Electric-Electric' Tests Resumed

Back from La Grange shops with new trucks, first two Electro-Motive FL-9 units have been undergoing renewed tests for New Haven—with good results reported. Unit shown above—trailed by EMD test car—is part of order for 60 such locomotives placed by New Haven early last year. Two units, which can be run as standard diesel-electrics or with power drawn from third rail for entry into Grand Central Terminal, have been operating on New Haven and New York Central tracks near New York City. Designed to solve NH problems of operating from third-rail current in city, locomotives are rated at 1,750 hp each. Unit has four-wheel truck at front end, six-wheel truck at rear. Cost of locomotives is put at $16,500,000.

regulatory agency and legislative personnel, the railroad situation must "degenerate" into government ownership, this individual declared.

What is necessary to solve the car shortage problems, he said, is railroad-owned equipment pools. He said he opposed "the idea of the railroads not owning their own equipment," noting that the Equitable plan did not meet with his approval although it would be preferable to the government agency plan.

He also complained that there had not been enough information disseminated on the plan for a substantial number of people to form opinions on it. He questioned how the plan's proponents hoped to get approval of the venture without acquiring informed backers.

A key shipper conceded that the plan probably would help the railroads. He said he didn't see how they could lose by it so long as the government was there with the "jackpot."

"Inherent dangers" of serious consequence are involved, however, he warned, largely because "once the government controls the purse strings" they want to control other things too. Not certain the plan would benefit the nation—with the truckers and other transport forms likely to ask to be included (Mr. Symes approved of this)—he still favored it if it would end "hodgepodge" purchases.

Slump Benches NYC 'Commodore'

Badly slumped first-class patronage has forced the New York Central to take off its "Commodore Vanderbilt" until after Labor Day.

The train's coaches will be added to the hitherto all-Pullman "Twentieth Century" which is to run at standard fares and with less frill-services than normally are offered on it.

A spokesman for the road said that what is being done is to consolidate the two New York-Chicago trains, running them both on the current "Century" schedules.

The Central's hostesses will continue to grace the road's most luxurious equipment but the barber and valet services will be curtailed.

The Central officer said the move is not an extraordinary one and had been contemplated before. Slumping summer Pullman travel on the Central had seen the "Commodore" travel as light as 68-70 passengers, he said, a condition that made it hard to make the train pay. He assured a reporter, however, that this was not a precursor to an eventual elimination of the train year-round.

He insisted further that the recent 15% first class fare rise on the New York Central was not a contributory factor to the traffic decline.

Actually, he said, there had been a last-minute rush to buy tickets just before the fares went up (the advance sale came to about $750,000 for the system, a third of this at New York City) and the road expects that it will be several months before the effect of the fare boost can be evaluated.

Half-Year Net Down $59 Million from 1956

Class I railroads in the first six months of this year had estimated net income, after interest and rentals, of $345,000,000 —down $59 million from the $404 million reported for last year's first half.

The latest statement from the AAR's Bureau of Railway Economics also shows that the six months net railway operating income, before interest and rentals, was down in like fashion—from $512 million to $450 million.

For June, estimated net income was off $21 million—$58 million compared with June 1956's $79 million. Net railway operating income for the month, at $74 million, was also off $21 million.

Twenty-one Class I railroads failed to earn interest and rentals in this year's first six months. Rate of return for the 12 months ended with June was 3.69% compared with 4.13% for the previous 12 months.

CLASS I RAILROADS—UNITED STATES
Month of June

	1957	1956
Total Operating Revenues	$867,914,786	$899,996,931
Total Operating Expenses	685,783,378	685,793,182
Operating Ratio—Per Cent	79.02	76.20
Taxes	86,895,657	96,686,233
Net Railway Operating Income (Earnings Before Charges)	74,030,563	95,258,445
Net Income, After Charges (Estimated)	58,000,000	79,000,000
	Six Months Ended June	
Total Operating Revenues	$5,233,825,887	$5,236,344,953
Total Operating Expenses	$4,110,382,398	$4,037,305,569
Operating Ratio—Per Cent	78.53	77.10
Taxes	541,759,233	558,823,136
Net Railway Operating Income (Earnings Before Charges)	450,303,531	511,593,738
Net Income, After Charges (Estimated)	345,000,000	404,000,000

ICC Switches, Okays B&M Debt Plan

Reversing its decision of 1½ years ago, the Interstate Commerce Commission's Division 4 has now approved the Boston & Maine's plan for substituting debenture bonds for its preferred stock.

The adverse report of February 28, 1956, said it "would tend to impair the confidence of investors in railroad securities generally for this commission to authorize the issue of debt securities, like those proposed here, where it is not reasonably certain that the interest thereon will be paid in years of normal, or even somewhat abnormal, revenues, and where there is such a substantial element of speculative risk." The present favorable report says that the earlier findings should be reversed in view of the entire record, including additional evidence.

"Applicant's present management, which assumed its duties in 1955," the report said, "has initiated many activities which promise well for the future, but as yet there has not been a chance to reflect fully the results of such activities in applicant's operating figures. The present Boston & Maine is a vastly improved railroad as compared with that which existed during the 1945-1954 period used in computing the average annual amount

available for fixed charges. It is now completely dieselized, and before the end of 1957 it will have completely modernized its freight equipment. Steps have been taken to improve the physical condition of the roadbed, track, and structures, which should result in substantial operational savings."

The exchange plan contemplates issuance of $28,461,510 of 5% income debentures and $1,355,310 of debenture scrip, to be exchanged for 271,062 shares of 5% preferred stock with par value of $100 per share. The exchange will be on the basis of 100 of debentures, $5 of debenture scrip, and $5.25 in cash for each share of preferred.

Savings in federal income taxes is the principal benefit anticipated. If all the preferred stock is exchanged, the net gain should amount to $672,234 a year, the commission said.

Hertz Officer Says Auto Rentals Boost RR Revenues

Rent-a-car convenience tied to railroad passenger service has boosted rail revenues according to J. J. Stedem, executive vice-president of the Hertz Rent A Car System.

Speaking at a Hertz system conference, Mr. Stedem said that it is not the airlines which are the prime competitor of the railroads, but the private automobile. He said the tieup of railroad and the car rental service had been especially valuable to the traveling business man.

Earl Padrick, chairman of the Transcontinental and Western Passenger Associations, told the conference that car rental availability had made the railroads more flexible.

"With this plan in effect," Mr. Padrick said, "there is no longer any unduplicated service offered only by the automobile. And, because it appeals most to travelers when they can't find ideal train service, it's a help to the railroads."

Commission to Restrict Rail Accident Reports

The Interstate Commerce Commission will restrict access to railroad accident reports which are now available for unrestricted public inspection. Similar reports filed by motor carriers are kept confidential at the commission.

The railroad reports involved are the monthly returns filed on Form T. More than 1½ years ago the commission announced that it was considering making them confidential. The proposal was questioned by a Congressional committee and the commission then said that, if it adhered to the proposal, it would not make it effective for another year (Railway Age Feb. 6, 1956, p. 11).

Late last year, the commission announced that it would give further consideration to the matter. It also revised other provisions of its rules for reporting railroad accidents, these becoming effective January 1 (Railway Age, Dec. 3, 1956, p. 12).

The restricted-access rule will become effective September 1, except as to accidents occurring prior to that date. The rule says:

"Accident reports made by railroads . . . shall be for the information of the commission and shall be open to public inspection only upon prior approval of an application by this comission. Applications for public inspection will be granted if the commission is satisfied that such inspection will not result in a violation of Section 4 of the Accident Reports Act and is for the purpose of obtaining information to be presented before federal and other governmental bodies, or which will contribute to the promotion of safety in railroad operations."

Section 4 of the Accident Reports Act is that which stipulates that neither the railroad reports nor commission reports on investigations of railroad accidents shall be admitted as evidence "or used for any purpose in any suit or action for damages growing out of any matter mentioned in said report or investigation."

House Would Nullify Sec. 22 Decision

The House has passed proposed legislation to make it clear that Section 22 quotations qualify for the anti-trust clearance which Section 5A confers on carrier rate-making procedures.

The legislation came after a federal district court had ruled that "concerted" Section 22 quotations made to government agencies are not covered by Section 5A, and are subject to the anti-trust laws. The ruling was by Judge Joseph C. McGarraghy in the U. S. District Court for the District of Columbia.

It was a case involving the Air Coach Transport Association's complaint against practices whereby railroads quote rates to the Department of Defense for troop movements (Railway Age, July 15, p. 10).

The railroads are appealing the suit, but the House Committee on Interstate and Foreign Commerce got into the matter because it felt that Section 5A was intended to cover Section 22 procedures as well as other rate-making practices. The legislation was attached as an amendment to a bill which proposes to revise Section 22, and it includes a proviso stipulating that it shall not affect "any liability or cause of action" which may have accrued prior to the date on which the bill becomes law.

Debate on the measure brought out the fact that the Department of Defense favors the Section 5A feature. Failure to enact it, the Department said, would result in nullifying the advantages of Section 22, and increasing the government transportation bill.

The proposed revision of Section 22 would add provisions requiring submission of Section 22 quotations to the ICC, except in cases where national security might be involved. Another provision would end Section 22 quotations for government shipments of household goods.

RDC Perks Up CNR Moncton-Campbellton Schedules

Starting August 12 Canadian National service between Moncton and Campbellton will be via Budd Company diesel car. "Railliner" service will trim running time one hour-forty minutes one way, an hour and a quarter the other. Coach can carry 48 passengers and mail, express and baggage. Schedules provide for connections with main line trains such as "Ocean Limited" for fast Halifax-Montreal service.

Current OPERATING DEPARTMENT Questions

Can the number of "No Bills" be reduced?

"One of my correspondents pleads for simplifying paperwork. This reminded me of the "no bill" situation. I think most agency and yard people are familiar with the amount of paperwork such cars frequently cause, not to mention other expense and patron dissatisfaction.

The accounting rules presently state that revenue waybills must accompany cars, "when possible." At the Kansas City Freight Station Section meeting, freight agents from Rochester, N. Y., apparently recommended that the rule be changed to read, simply: "Revenue waybills must accompany cars." Obviously, the Rochester agents thought that it would save time and money in the long run if cars were held at origin until the revenue waybill was ready to move with the car.

I'd be willing to concede that if the waybill was with the car, in all cases, everybody would be a lot happier. But I wonder how the railroads' traffic departments would feel about such a proposal? Yardmasters, I'm afraid, still would be tempted to get the car moving, bill or no bill, rule or no rule. And how could the rule be enforced, especially on one-line movements?

I don't know what action the agents' meeting took on this proposal, but I'd sure like to get expressions of readers' views on this matter.—*G. C. R.*

Can intraline checking of LCL be eliminated?

A freight agent of a large Eastern road writes as follows:

". . . I was pleased to see the recommendation made at the recent Kansas City meeting of the Freight Station Section, Association of American Railroads, to which you alluded in a previous issue (June 10, 1957, p. 18), concerning the elimination of intraline checking of LCL freight shipments with the view of expediting their movement. This method of operation has been carried on successfully by the Railway Express Agency for some years.

"I personally feel that there are many 'minimized paperwork' practices in Railway Express operations that the railroads would do well to copy."

Is written notice of shipment's arrival essential?

This question was suggested by the same correspondent. He gives no indication of what prompted him to write. Maybe it was the two provisions of the demurrage tariff which he discusses.—*G. C. R.*

"There are two Interstate Commerce Commission requirements which I cannot see to be justifiable.

"The first is Rule 4, Item 615, of Freight Tariff 4-C, ICC 4677 (car demurrage rules), which requires a notification in writing upon arrival of LCL or carload shipments (on public delivery tracks), unless telephone authority is on file.

"Strictly urban sections where LCL shipments are handled almost exclusively in delivery service are not particularly affected by this ruling. However, in rural areas and areas where suburban developments beyond delivery limits exist, this adds at least a day, and sometimes more, to the transit time of the merchandise involved, plus the inconvenience of preparing and mailing arrival notices.

"The percentage of shipments on which storage charges would accrue, and the percentage of the few on which receipt date of telephone notice would be disputed is so negligible as to render this ruling almost ridiculous, particularly in view of the extra delay and inconvenience incurred. Actually, the carrier has no more proof that a card of arrival notice was mailed than an indication (notation) on the delivery receipt. And when telephone notice is given a similar notation is made on the delivery receipt.

"The second requirement for which I cannot see practical justification is that of the daily physical track check, other than possibly in the public delivery yards.

"So far as outbound cars are concerned, track check is unnecessary, because cars loaded remain on demurrage until forwarding instructions have been received by the carrier. Therefore, the primary objective of physical track check, as I see it, is to assure proper release and prompt movement of cars which have been unloaded.

"For large shippers and receivers whose plants may be shifted one, two or more times a day, the physical track check is of no further value than to verify cars which have been made empty prior to the 7 a.m. changeover. This is because the plant set-up usually is given to the yardmaster prior to each shift, and cars can be released from the conductor's slips.

"Smaller patrons who receive only a few cars a day or week, could be, I'm sure (with much patience and diplomatic persistence on the part of the railroad), 'trained' to report their cars empty. And until such time as this could be accomplished, a telephone call prior to shifting time can be made much quicker than a physical track check.

"These are but two of many ICC requirements and railroad practices which I feel expend time, effort and money whose value is in excess of the charges they seek to protect."

I'll welcome comments. Certainly my correspondent's *objective* is a worthy one.

CONDUCTED by G. C. RANDALL, district manager, Car Service Division (ret.), Association of American Railroads, this column runs in alternate weekly issues of this paper, and is devoted to authoritative answers to questions on transportation department matters. Questions on subjects concerning other departments will not be considered, unless they have a direct bearing on transportation functions. Readers are invited to submit questions, and, when so inclined, letters agreeing or disagreeing with our answers. Communications should be addressed to Question and Answer Editor, Railway Age, 30 Church Street, New York 7.

A34 SERIES B HY-RAIL CAR offers a Pontiac Station Wagon body; a rugged 252-h.p. V-8 engine; Hydra-Matic drive; power braking and steering. Rail wheels are operated hydraulically and are locked in position mechanically. Load capacity: eight passengers or driver plus 1050 lbs.

When you think of
MODERN TRANSPORTATION

. . . think first of **Fairmont**

A35 SERIES A HY-RAIL CAR is powered by a 6-cylinder engine and offers four-wheel drive and four-speed transmission with underdrive. Load capacity: 2600 lbs. Primarily for maintenance service.

A30 SERIES C HY-RAIL CAR, which travels on both road and rail with equal ease, is powered by a rugged 6-cylinder, 115-h.p. engine. Will carry as many as 10 men under ordinary driving conditions. 1500-lb. load capacity.

The Fairmont Hy-Rail car has—since its introduction by Fairmont a few years past—become an increasingly important part of the American railroading scene. And very logically so, for the Hy-Rail car completely eliminates time-consuming "change-overs" . . . permits rapid transit from home base to points of work . . . operates equally well on road or rail. If you would like to have further details on this new, modern way to transport men and tools, drop a line to Fairmont. We'll be delighted to give you the complete story!

FAIRMONT RAILWAY MOTORS, INC., FAIRMONT, MINN.

MANUFACTURERS OF BALLAST MAINTENANCE CARS, DERRICK CARS, OIL SPRAY CARS, GROUTING OUTFITS, TIE RENEWAL EQUIPMENT, RAIL RENEWAL EQUIPMENT, WEED CONTROL EQUIPMENT, HY-RAIL CARS, TRACK MOTOR CARS PUSH CARS AND TRAILERS.

This beautiful, new overpass erected at Winthrop, Maine has sidewalk railings made of Continuous Weld Yoloy Steel Pipe. Yoloy's extra strength and excellent corrosion-resistance are qualities required for applications of this type.

"Yoloy" pipe is on the job

. . . providing strong, corrosion-resistant bridge railings for Maine State Highway Commission

Maine chose Yoloy! It proved so easy to fabricate and weld that 2 additional Maine bridges will have Yoloy railings. This nickel-copper alloy steel also demonstrates added strength and longer life making it an ideal structural pipe!

Available in Sheets, Plates, Bars, Shapes, Cold Drawn Bars and Tubular Products, Youngstown's complete family of Yoloy steels provides the right grade for each of your specific jobs. Complete informative Data Sheets on each Yoloy steel will be sent you promptly upon request.

OVERPASS AT WINTHROP, MAINE ERECTED FOR THE BRIDGE DEPARTMENT OF MAINE STATE HIGHWAY COMMISSION. YOLOY PIPE WAS SOLD THROUGH JOBBER W. L. BLAKE CO., PORTLAND, MAINE, TO BANCROFT & MARTIN ROLLING MILLS CO., SOUTH PORTLAND, WHO FABRICATED THE BRIDGE RAILINGS. CIANCHETTI BROS., INC., PITTSFIELD, MAINE, ERECTED THE SECTIONS FOR GENERAL CONTRACTOR H. E. SARGENT, INC., STILLWATER, MAINE.

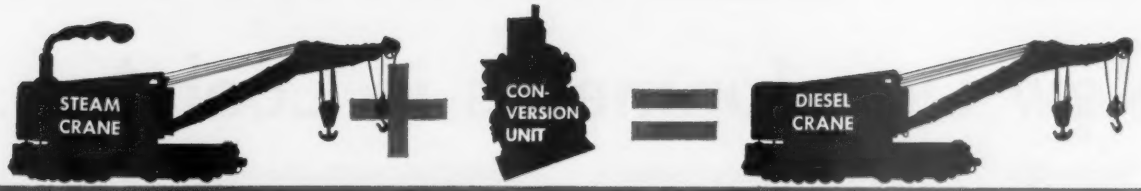
PHOTOS COURTESY OF MAINE STATE HIGHWAY COMMISSION

THE YOUNGSTOWN SHEET AND TUBE COMPANY
Manufacturers of Carbon, Alloy and Yoloy Steel
General Offices - Youngstown 1, Ohio
District Sales Offices in Principal Cities

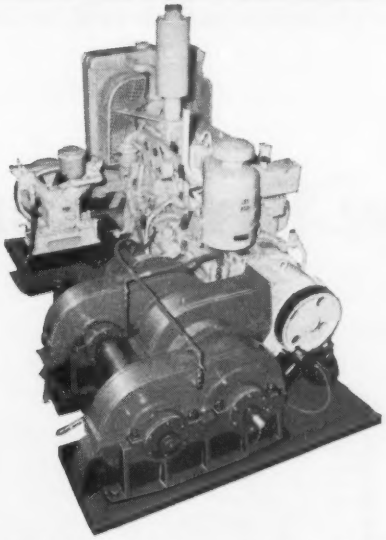
QUALITY YOUNGSTOWN SERVICE

WRITE FOR THESE FREE PAMPHLETS IN THE YOLOY FAMILY SERIES:

YOLOY "E"	HIGH STRENGTH-LOW ALLOY STEEL-STANDARD APPLICATIONS
YOLOY	HIGH STRENGTH STEEL-SPECIAL APPLICATIONS
YOLOY "S"	HIGHER STRENGTH STEEL FOR INCREASED SERVICE LIFE
YOLOY "C"	CORROSION RESISTANT GRADE FOR DEEP FORMING
YOLOY PIPE	CONTINUOUS WELD FOR CORROSION RESISTANT APPLICATIONS



HOW SUBSTANTIAL SAVINGS IN LOCOMOTIVE CRANE FUEL COSTS ARE BEING MADE WITH THESE STEAM-TO-DIESEL CONVERSION UNITS



The economy of diesel engine operation is such that, with savings on both lower fuel and lower maintenance costs, the initial expenditure on a Brownhoist Diesel Conversion Unit is soon amortized. Brownhoist Conversion Units are engineered to the individual requirements of your crane. The component parts consist of the diesel engine, the torque converter, the roller bearing mounted friction clutches, and the air compressor . . . all mounted on a heavy one-piece slab base ready for installation. These units are completely assembled and tested before shipment to you, and the conversion bill-of-material becomes a permanent part of your crane record, to expedite future service. Write today or contact your Industrial Brownhoist representative (give crane serial number).

THIS 1925 150 TON WRECKER WAS STEAM, IS NOW DIESEL
RESULT:

LOWER OPERATING COSTS

This Brownhoist 150 Ton Steam Wrecking Crane, built in 1925, was recently adapted to diesel with one of our conversion units. Its operators report a substantial savings in maintenance and fuel bills, more than justifying the cost of conversion.

BROWNHOIST

BROWNHOIST MATERIALS HANDLING EQUIPMENT GIVES A LIFT TO AMERICAN INDUSTRY

SUBSIDIARY OF Penn-Texas Corporation

INDUSTRIAL BROWNHOIST CORPORATION
BAY CITY, MICHIGAN • DISTRICT OFFICES: Philadelphia, Washington, Cleveland, Chicago, San Francisco, Montreal
AGENCIES: Detroit, Birmingham, Houston

New Developments in Coal Are . . .

"Air fluidized" coal handling from mine to turbine is a revolution in design concepts which of necessity has followed a revolution in coal mining techniques that has taken place during the Locomotive Development Committee's 12-year coal-fired gas turbine project.

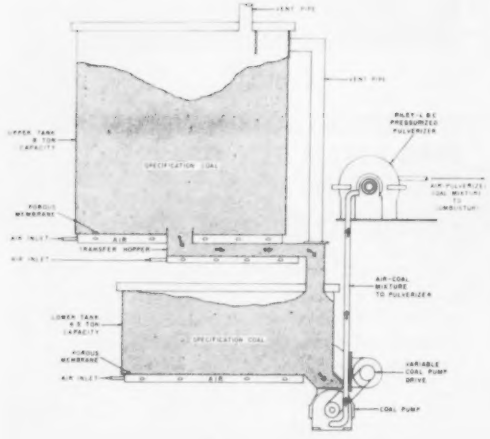
In a little over a decade, coal mining has gone from hand loading of mechanically mined coal to mechanized loading, and most recently, to "continuous" mining—combined and simultaneous mechanical mining and mechanical loading. This mechanization has meant a dramatic increase in the amount of coal produced per man-day during this period.

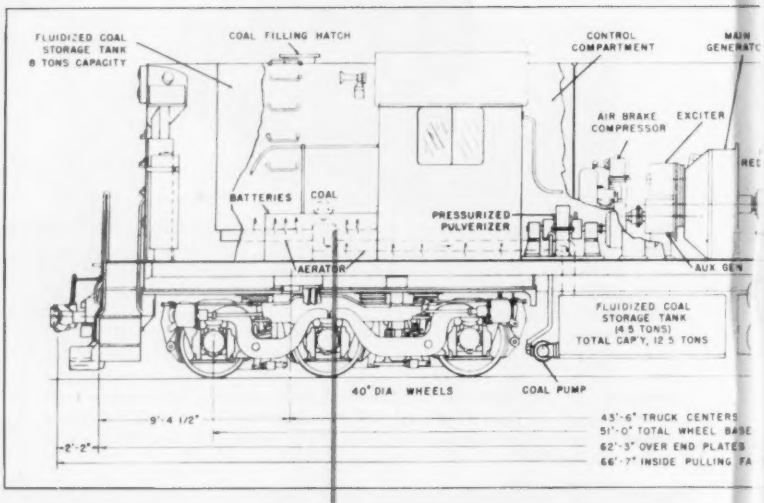
"Run-of-mine," long familiar to railroaders, is a term almost foreign to the big volume coal producers of today. Continuous mining produces smaller coal sizes and has changed coal preparation methods by making mechanical cleaning almost mandatory and universal. The usual method for mechanical cleaning is washing—using flotation to separate coal from the dirt and rock which inevitably come along with the coal in continuous mining.

Today's Specifications

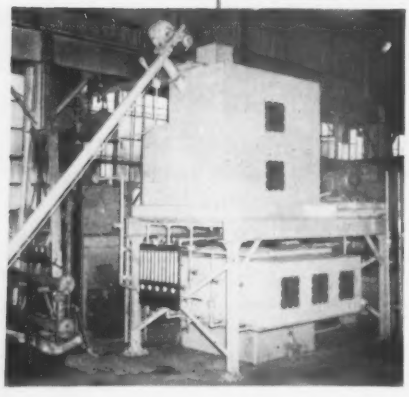
These "wet" cleaning processes are followed by mechanical water separation and thermal drying so that moisture in today's coal is an exactly regulated quality. Since today's big mining operations all produce coal which must go through preparation plants, all of today's coal consumers are getting specification fuels in which ash, moisture and size are all controlled. As an example

. . . Leading to New Developments





AERATED COAL SYSTEM



Coal turbine enters "final lab phase"

"Encouraging," comments F. H. Einwaechter, chairman of the AAR Mechanical Division's locomotive committee, on the accomplishments of the Locomotive Development Committee's coal-fired gas-turbine laboratory at Dunkirk, N. Y.

Agreement between the Union Pacific and Alco Products, Inc., on the development of the first coal-fired gas-turbine locomotive has just been announced.

Summarizing this whole situation, Col. R. B. White, chairman of LDC, recently stated, "Right now there is more interest, here and abroad, in what this committee has done and is now doing than at any time in the past."

of this, the coals currently being burned at the LDC Dunkirk plant are Pocahantas and Pittsburgh seam coals specified in the trade as "3/16 by 0 Slack with 35% minus 50 mesh and with 3.5% total moisture."

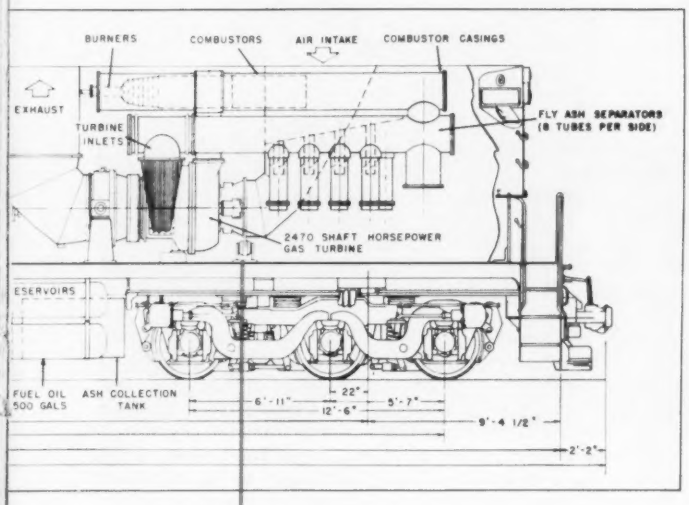
The coal which is the fuel for present and projected LDC gas-turbine work is the same size and specification fuel bought by utilities—a group which now uses over 35% of the national coal production. This is the cheapest fuel available on a heat-unit basis. Recently a coal industry spokesman told Railway Age that in preparing this utility-type fuel for a railroad market, "coal companies would do everything economically feasible in the way of preparation before it goes on a locomotive."

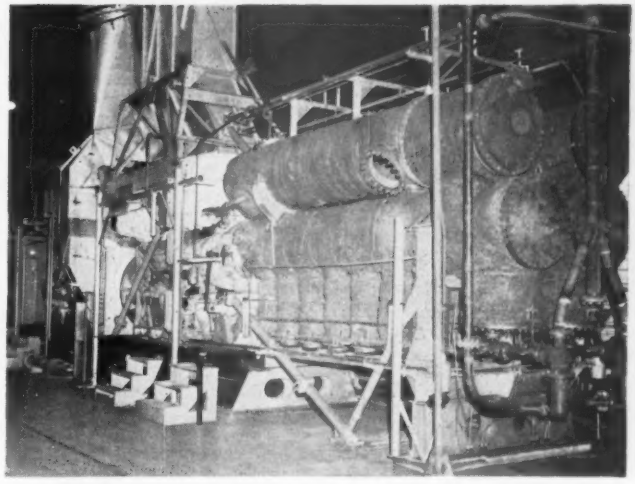
"Everything economically feasible" right now puts coal in condition to be fired with little difficulty in the LDC turbine today. The fuel as prepared and dried at mines can be moved successfully in open top cars for hundreds of miles. Rain encountered en route does little to change the moisture content of this lading, according to LDC studies. The plant has shown itself able to burn Pittsburgh seam, Pocahantas and Wyoming coals.

Ability to use different fuels is but one phase of the versatility which characterizes many LDC-developed components which are suddenly being looked at with new respect by all types of industry. Developments of the LDC Dunkirk laboratory are already being used in non-railroad industry, and promises are that there will soon be many more such applications.

This railroad-sponsored project's combustion and turbine system promises to find a place in stationary power generation—either as an independent prime mover, or as an adjunct to the pressurized boiler which promises to make possible the next big jump in central electrical power station thermal efficiency. The petroleum industry is already using the LDC fly-ash separators (Dunlab tubes) to recover catalyst carried over in its refining processes. The chemical industry is interested in the LDC coal pump as a pressurized feeder for chemical processes.

in Coal-Fired Gas Turbine





GAS TURBINE

Early last year LDC announced that the laboratory phase of the development should be concluded during 1957 (Railway Age, March 5, 1956, p. 36). Present indications are that this prediction will not be wrong. Right now the gas turbine power plant has run off well over 900 hours of what is termed its "final commercial acceptability test." This was to be a run of 1,000 operating hours and should be concluded within the next few days.

Evaluation of the 1955 test program led the committee to authorize modification of the locomotive coal system and a partial reblading of the gas turbine. It is the test of these modifications which is now under way.

Excessive Wear Overcome

Blade erosion experienced during the 1955 operation was made the subject of conferences with the National Advisory Committee for Aeronautics at Cleveland. NACA had done aircraft gas turbine work which indicated that a secondary gas flow pattern was being set up inside the LDC turbine and was causing the erosion at the roots of the rotor blades.

Blade design changes have now made possible the elimination of inner stage gland seal rings, and the use of new alloys for these blades is expected to produce a commercially acceptable turbine blade life. While the turbine was opened for reblad-

New Developments in Coal Are . . .

"Air fluidized" coal handling from mine to turbine is a revolution in design concepts which of necessity has followed a revolution in coal mining techniques that has taken place during the Locomotive Development Committee's 12-year coal-fired gas turbine project.

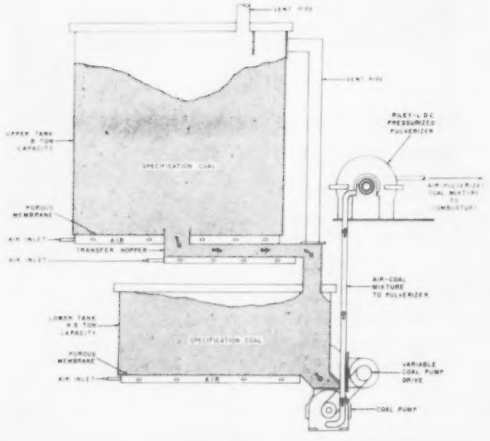
In a little over a decade, coal mining has gone from hand loading of mechanically mined coal to mechanized loading, and most recently, to "continuous" mining—combined and simultaneous mechanical mining and mechanical loading. This mechanization has meant a dramatic increase in the amount of coal produced per man-day during this period.

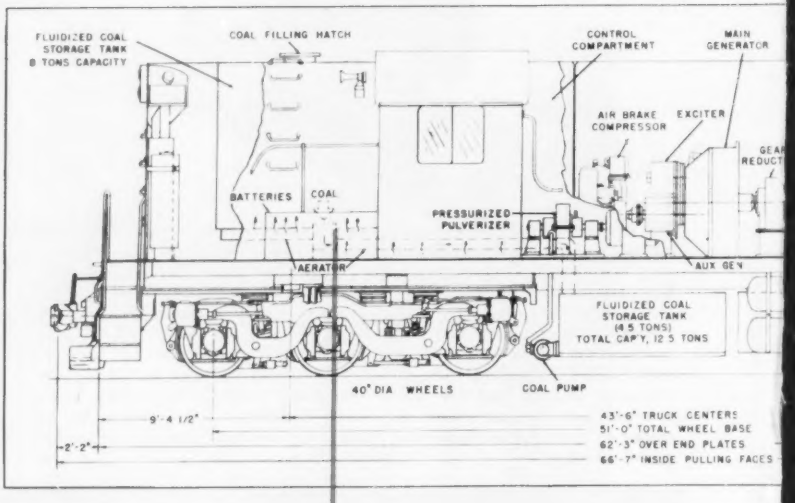
"Run-of-mine," long familiar to railroaders, is a term almost foreign to the big volume coal producers of today. Continuous mining produces smaller coal sizes and has changed coal preparation methods by making mechanical cleaning almost mandatory and universal. The usual method for mechanical cleaning is washing—using flotation to separate coal from the dirt and rock which inevitably come along with the coal in continuous mining.

Today's Specifications

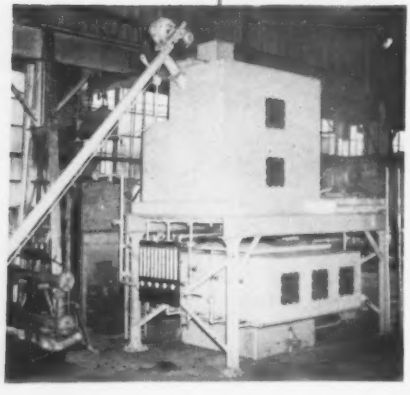
These "wet" cleaning processes are followed by mechanical water separation and thermal drying so that moisture in today's coal is an exactly regulated quality. Since today's big mining operations all produce coal which must go through preparation plants, all of today's coal consumers are getting specification fuels in which ash, moisture and size are all controlled. As an example

. . . Leading to New Developments





AERATED COAL SYSTEM



Coal turbine enters "final lab phase"

"Encouraging," comments F. H. Einwaechter, chairman of the AAR Mechanical Division's locomotive committee, on the accomplishments of the Locomotive Development Committee's coal-fired gas-turbine laboratory at Dunkirk, N. Y.

Agreement between the Union Pacific and Alco Products, Inc., on the development of the first coal-fired gas-turbine locomotive has just been announced.

Summarizing this whole situation, Col. R. B. White, chairman of LDC, recently stated, "Right now there is more interest, here and abroad, in what this committee has done and is now doing than at any time in the past."

of this, the coals currently being burned at the LDC Dunkirk plant are Pocahantas and Pittsburgh seam coals specified in the trade as "3/16 by 0 Slack with 35% minus 50 mesh and with 3.5% total moisture."

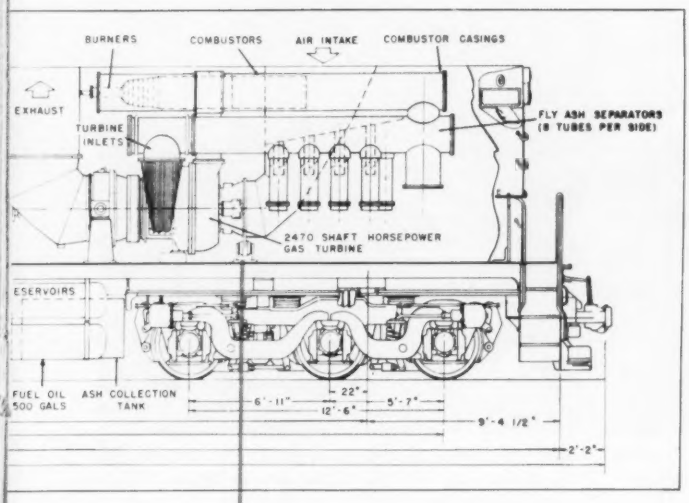
The coal which is the fuel for present and projected LDC gas-turbine work is the same size and specification fuel bought by utilities—a group which now uses over 35% of the national coal production. This is the cheapest fuel available on a heat-unit basis. Recently a coal industry spokesman told Railway Age that in preparing this utility-type fuel for a railroad market, "coal companies would do everything economically feasible in the way of preparation before it goes on a locomotive."

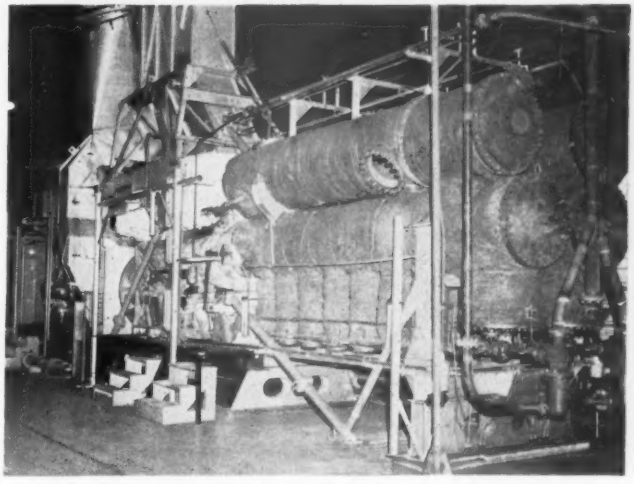
"Everything economically feasible" right now puts coal in condition to be fired with little difficulty in the LDC turbine today. The fuel as prepared and dried at mines can be moved successfully in open top cars for hundreds of miles. Rain encountered en route does little to change the moisture content of this lading, according to LDC studies. The plant has shown itself able to burn Pittsburgh seam, Pocahantas and Wyoming coals.

Ability to use different fuels is but one phase of the versatility which characterizes many LDC-developed components which are suddenly being looked at with new respect by all types of industry. Developments of the LDC Dunkirk laboratory are already being used in non-railroad industry, and promises are that there will soon be many more such applications.

This railroad-sponsored project's combustion and turbine system promises to find a place in stationary power generation—either as an independent prime mover, or as an adjunct to the pressurized boiler which promises to make possible the next big jump in central electrical power station thermal efficiency. The petroleum industry is already using the LDC fly-ash separators (Dunlab tubes) to recover catalyst carried over in its refining processes. The chemical industry is interested in the LDC coal pump as a pressurized feeder for chemical processes.

in Coal-Fired Gas Turbine





GAS TURBINE

Early last year LDC announced that the laboratory phase of the development should be concluded during 1957 (Railway Age, March 5, 1956, p. 36). Present indications are that this prediction will not be wrong. Right now the gas turbine power plant has run off well over 900 hours of what is termed its "final commercial acceptability test." This was to be a run of 1,000 operating hours and should be concluded within the next few days.

Evaluation of the 1955 test program led the committee to authorize modification of the locomotive coal system and a partial reblading of the gas turbine. It is the test of these modifications which is now under way.

Excessive Wear Overcome

Blade erosion experienced during the 1955 operation was made the subject of conferences with the National Advisory Committee for Aeronautics at Cleveland. NACA had done aircraft gas turbine work which indicated that a secondary gas flow pattern was being set up inside the LDC turbine and was causing the erosion at the roots of the rotor blades.

Blade design changes have now made possible the elimination of inner stage gland seal rings, and the use of new alloys for these blades is expected to produce a commercially acceptable turbine blade life. While the turbine was opened for reblad-

ing, deflectors and skimmers were installed along the main gas flow paths to divert fly ash from critical areas of rotating parts.

Difficulties encountered during the previous test program with the ash separators were due to failure of instrumentation which sometimes did not indicate fly-ash buildup. A manifold type ash blowdown has greatly simplified what is now conceded to have been an "over engineered" arrangement. This year's 900 test hours have been accomplished with no plugging in the ash-handling system.

Air-Handled Coal

The present tests are being conducted with the turbine fired from a coal-handling system which treats the coal as an "air fluid" from the time it is placed on the "locomotive." Usually, it is the intention of LDC that railroads would handle and store gas-turbine coal as an air fluid even before it goes on the locomotive. This is a change from the original 1945 concept of the project which was to carry, prepare and burn run-of-mine coal right on the motive power unit.

It was during 1953 that the "air fluidized" coal concept was first made an eventual goal of LDC designs. Through the end of the 1955 tests, the 1951 bin-and-feeder coal-handling system continued in service, but was—in the words of a committee report—"unduly complicated, heavy and expensive."

The present "aerated" (air fluidized) coal-handling arrangement is the same type that would be applied to a diesel road switcher if it were to be converted to accommodate a gas-turbine prime mover. In this system, a 3/16-in. by 0-in. dried coal (i.e., particles 3/16-in. or smaller) flows from aerated tanks without need for mechanical conveyors (much like the system used in Airslide hoppers). This fine coal is then metered and delivered by the LDC rotary coal pump into the conveying air which carries it through the pressurized LDC-Riley pulverizer.

The entire coal handling system has been performing well during the present tests and the pulverizer has been doing an exceptional job in producing extremely small coal particles, LDC reports. Such particles should result in a very fine fly ash and could be a factor in making turbine blades last still longer.

The fundamental nature of LDC work in the production, moving, separation and combustion of extremely small solid particles in a pressurized system which has claimed the respect of other industries has not concealed the basic assignment of the original project. All along, this has been to produce a successful coal burning gas-turbine locomotive which would continue coal as a railroad fuel. It was to burn coal originally because the cost of coal per heat unit was only one-fourth as much as diesel fuel. The same economic relation and incentive exists today, and the performance at Dunkirk now indicates that the road test phase of this project should not be far off.

Railroading After Hours with Jim Lyne

REVISING THE RECORD—In a "round-up" article on music in passenger trains in our June 10 issue, p. 47, we mentioned three roads as having started this service in 1950. My friend C. W. (Dinty) Moore of the GN reminds me that the "Empire Builder" has provided this amenity for passengers since 1947; and another friend, Gil Kneiss of the WP, says "Cal Zephyr" patrons have enjoyed music since 1949.

Another one. In this space May 6 I told about a pamphlet on "operations research" by Dean Lawrence C. Lockley, but I ascribed the dean to UCLA instead of USC. Assistant Transportation Professor K. G. Clare of USC set me straight on this one, and on another ascription of a USC activity to UCLA in our June 24 issue. I well know that USC and UCLA are separate institutions, but my pencil slipped.

I fully expected to get some mail, however, about my mention of that operations research booklet—because, from what I've seen, there are a lot of people who are either very strong for operations research or are just strong against it. To me OR (as they call it) looks like a new name for something that has been going on for quite a long time, but probably not in as many places as it could do so with profit.

RAILROAD LINGUISTS—I have been curious to find out whether there are any considerable number of railroad men who have really acquired a command of some language other than English. There could probably be developed more interchange of interesting information between railroad people of different countries if the language barrier were trimmed down some. I know one Illinois Central officer (O. J. Williford, foreign freight traffic manager) who has a good command of Spanish; and an IC alumnus (later with the AAR and the B&M) L. J. Kiernan, who also gets along mighty well in Castilian.

It has often occurred to me that Canadian railroad men have a wonderful opportunity to acquire French. I got well acquainted with one the other day (W. B. Jackson, CNR general superintendent, North Bay, Ont.) who has grasped this opportunity. No doubt about it either, because I heard him carry an a conversation with some French-speaking kids on a street corner in Sherbrooke, P.Q.—and talking to children is the real test of knowledge of any language.

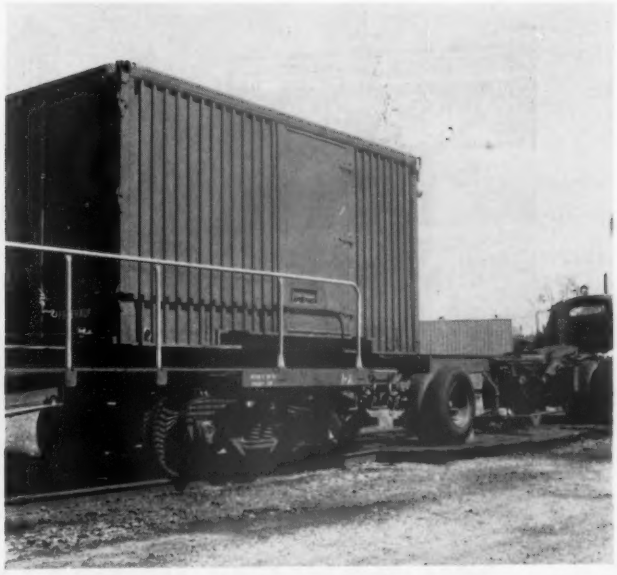
PROCESS IN TRANSIT?—W. Y. Nagle, Jr., an agent for the Lackawanna, has passed along an interesting suggestion to my colleague Bob Lewis. It is that railroads seek out products that could be processed in transit—the way concrete is mixed in those transit trucks.

Sorting of mail en route, of course, is an application of this principle. Back in the days before planes got to be as reliable as they've become, news films used to be developed in baggage cars on fast trains—so they'd be ready to show in movie theaters on arrival.

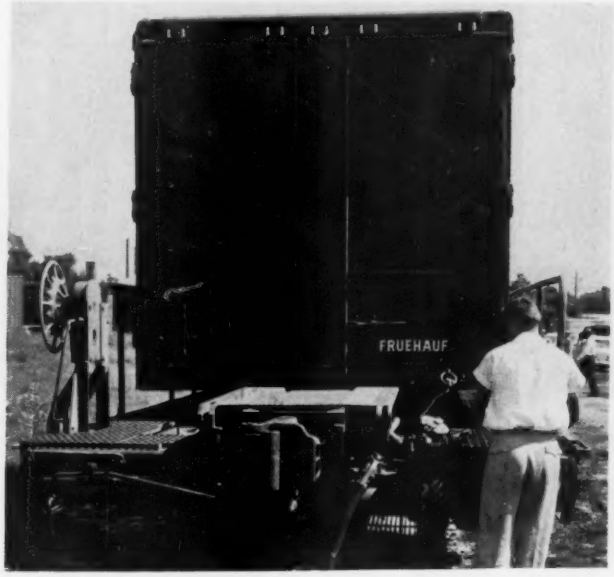
There are some movements where railroad cars are counted on to serve, in part, as warehouses, but I can't recall that a manufacturing process is regularly carried out in moving freight cars: As Mr. Nagle points out, there probably isn't any other form of transportation which would lend itself to this use as readily as a railroad.

FOR MEN ONLY?—A Detroit reader, George L. Snyder, writing as an experienced railroad man, also a railroad rider, says that "when a man boards a train he wants to relax in quiet." In this regard he believes every through train should be equipped with a coach at the head end "for exclusive male use." He's noted that some air lines do offer their own variety of such (i.e., flights for men only—no ladies allowed, except the hostesses). Are there any railroads now providing the kind of accommodation Mr. Snyder asks for?

ON THE TRUCK, container acts as over-the-road or pickup van.



QUICK TRANSFER to trailer is made by air-operated winch.



CONTAINER MOVES on rollers; other methods can be used.

TRUCK BED uses "Clejan-type" piggyback flat car principle.

Test Pairs Container, 'Clejan' Car

Rejuvenation of container use in railroad transport was visualized by some observers at a demonstration of a new piggyback technique July 24.

An experimental project developed jointly by the Southern Pacific, Piggy-Back, Inc., and Fruehauf Trailer Corporation, the method is another answer to the "Why carry the wheels?" criticism of standard TOFC practice. As demonstrated for railroad personnel at the Erie's Hammond, Ind., piggyback terminal, the system works like this:

A specially fitted truck-and-trailer combine backs up to the end of a "Clejan-type" piggyback flat car where a connection is made between the car and the trailer chassis. The "box" or van on the trailer is then drawn lengthwise onto the flat car on rollers—power coming from an air-operated winch. Once the trailer body is in place, its chassis and wheels are disengaged and pulled away with the tractor unit.

On express lines . . . and at whistle stops . . .

The performance and the brand are the same around the world

Other Outstanding Shell Industrial Lubricants

Shell Tellus Oil—for closed hydraulic systems

Shell Alvania Grease—multi-purpose industrial lubricant

Shell Turbo Oil—for utility, industrial & marine turbines

Shell Dromus Oils—cutting oils for high-production metalworking

Shell Rimula Oil—for heavy-duty diesel engines

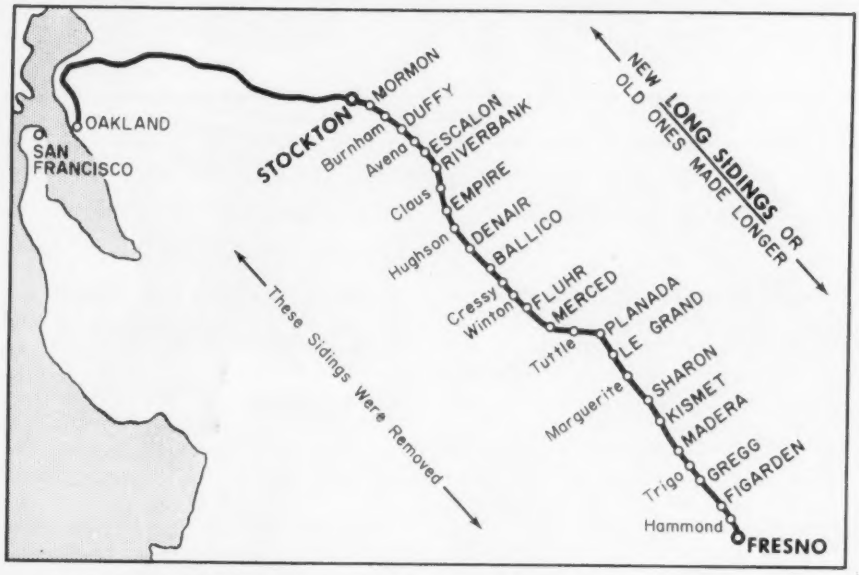
SHELL TALONA R Oil 40 offers two outstanding reasons for its acceptance as a top-rated diesel-electric locomotive lubricant. It provides superior anti-wear protection and maintains engine performance.

Greatly reduced wear on pistons, rings and cylinder liners is assured because of the selected combination of additives used in Talona® R Oil 40. It has high oxidation stability, combined with resistance toward corrosion and sludge formation. It prevents ring fouling and provides excellent detergent-dispersant action.

Today—railroad operators abroad can enjoy the same Talona R Oil 40 the domestic carriers rely upon. For complete information, write to Shell Oil Company, 50 West 50th St., New York 20, N.Y., or 100 Bush Street, San Francisco 6, Calif.

SHELL TALONA R OIL 40

SHELL



1. LONG SIDINGS permit more non-stop meets and . . . .

This 124-mile Fresno-Stockton single-track section is part of the Santa Fe route between Chicago and San Francisco. Eight through passenger trains and about 14 through freights are operated daily. Extra trains, and a local freight each way daily except Sunday, increase the total to 20 to 24 trains.

2. EASY TURNOUTS promote higher speeds.

This CTC Saves Time Two Ways

Signaled sidings about two miles long, with simple aspects to direct trains to utilize No. 20 turnouts efficiently at 40 mph, are aids in making non-stop meets on 231 miles of busy Santa Fe single track

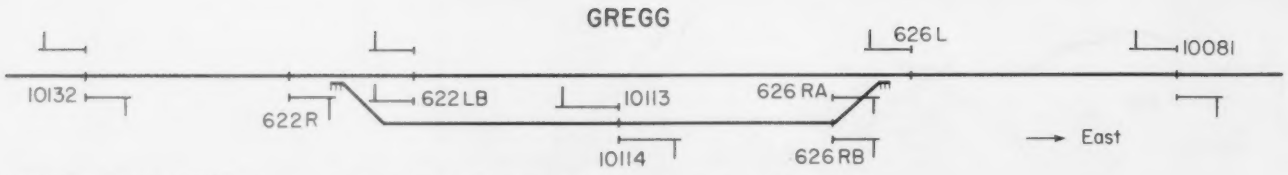
To save train time and increase track capacity, the Santa Fe has installed centralized traffic control on its heavy traffic line between Fresno, Cal., and Stockton. This section is in the San Joaquin valley, where thousands of carloads of potatoes, grapes, raisins, oranges and other fruits and vegetables, as well as cotton and livestock, are shipped each season.

Formerly train movements were authorized by timetable and train orders, with automatic block signal protection. Spring switch mechanisms were in service at both switches at all principal sidings.

In this territory the railroad traverses open level terrain, with very light grades ranging up to about 0.3 per cent. The curvature is light, with sections of tangent 10 to 14 miles long. Passenger train speeds, which are 95 mph maximum, are reduced to 75 mph on seven 2 deg curves, and to 55 for one of 3 deg. Freight speeds, 60 mph maximum, are reduced to 55 mph on the 3 deg curve. In general, trains can accelerate quickly, and can maintain maximum permissible speeds for long distances.

The special feature of this project is the use of sidings about 2 miles long, which permit more meets to be made without either train stopping. Also contributing to this objective are long turnouts with special signaling.

Previously, in this territory there were 25 sidings, most of which were about a mile long with a capacity of 80 to 96 cars. Thirteen of these sidings were extended to about two miles in length (173 cars) and one new two-mile siding was



SPECIAL SIGNALING helps trains to enter sidings at higher speeds with safety

built (at Duffy). At Sharon, the old siding was extended to a total of 11,280 ft, with a crossover at the center. At Merced the siding was extended to 11,350 ft. At Riverbank, where freight crews change, the previous 8,430-ft siding on the north side was left as it was, and a new siding about the same length was built on the south side. At Mormon, just east of Stockton, the second track was extended east 13,200 ft with crossovers 8,400 ft west of the new east switch, thus forming more second track as well as a long siding. Ten other previous sidings, each about 6,000 ft, were removed. Thus in addition to the two extra long sidings—at Sharon and Merced—there are now 14 sidings, each about 2 miles long.

High Speed Turnouts

To increase the speed at which trains can enter and leave sidings, new No. 20 turnouts were installed at the end of all these long sidings. The tangent continues throughout the frog to a point 403 ft from the toe of the frog to a point of spiral of a 1-deg 30 min curve, with spiral lengths of 60 ft. This alinement beyond the 1 deg 30 min curve, consists of a tangent about 100 ft long which brings the track centers back to 14 ft.

The Santa Fe has a special arrangement of signals and simple aspects that direct enginemen to bring trains up to and through a turnout at 40 mph, rather than at slower speed. At Gregg, for example, with the siding unoccupied, when the dispatcher sends out a control for a westbound train to enter this siding, the switch is reversed and westward signal 626L displays the Diverging-Clear aspect, red-over-green, and the distant signal, 10081, displays the Advance aspect, yellow-over-yellow.

At the middle of the siding is an automatic block signal for each direction; signal 10113 being the westward signal. As the westbound train pulls into Gregg siding, this automatic signal 10113 displays the Approach aspect, yellow, leading up to the Stop aspect, red, on leave-siding signal 6221LB. Thus the engineman has complete information to safely bring his train up to and through the turnout at 40 mph.

In the meantime, the dispatcher can bring an eastbound train up to Gregg for a close meet. He controls eastward signal 622R to display the Approach aspect, yellow, and distant signal 10132 to display the Advance aspect, yellow-over-yellow. Thus the eastbound train is brought up to signal 622R at medium speed and continues toward signal 626RA. As soon as the westbound train clears the east switch, it is placed normal, and signal 626RA is cleared for the eastbound train, so that train can go through at accelerating speed. When this eastbound train clears the west switch, it is placed reverse, and signal 622LB is cleared for the westbound train to keep right on going out through the west end switch. Thus, long sidings, high-speed turnouts, and complete but simple signaling are coordinated so that meets are made with neither train being required to stop.

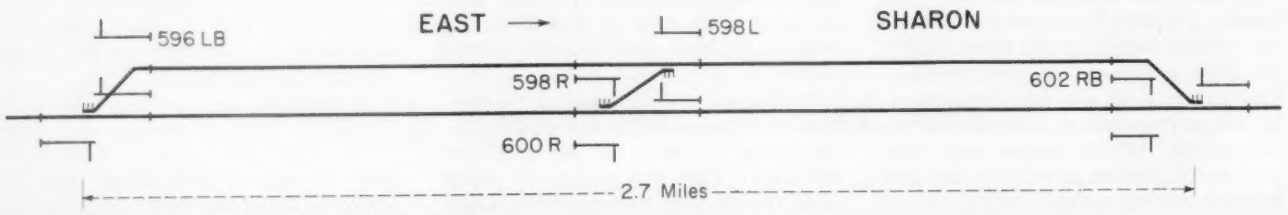
Benefits of This CTC

At Sharon, where the siding is 2.7 miles long, there is a crossover between the main track and siding at the center of the siding. In this arrangement, a westbound train can be directed to enter the east end of the siding, and pull on down to the west end, to stop short of leave-siding signal 596LB, with its rear west of signal 598R at the crossover. Then an eastbound train can be directed to enter the siding at the crossover and stop short of leave-siding signal 602RB. After a third train passes on the main track, the leave-siding signals can be cleared for the two trains to depart promptly.

The completion of this CTC between Stockton and Fresno, together with 107 miles of such construction between Fresno and Bakersfield in 1953, makes a total of 231 miles of this arrangement of long sidings and CTC on single track. These new facilities have helped to improve on-time performance of passenger trains and have reduced delays to freights. Also, with the CTC, freight trains can be directed to leave yards promptly when ready, rather than waiting for orders. The time thus saved is considerable, although it does not become obvious in comparing present operation with train sheets of previous operation.

As explained by the division superintendent, S. Rogers, the new sidings and CTC have been effective, in general, in saving about two hours for each freight train between Bakersfield and Fresno, as well as between Fresno and Stockton. If passenger trains are received behind schedules, they can be given preference to help make up time. On the Bakersfield-Stockton section there are 5 meets daily between passenger trains. On an average day there may be about 15 meets between passenger trains and freights, and as many as 13 meets of freights with freights. All these meets are on close time and about 50 per cent are running meets, with neither train coming to a stop.

This signaling was planned and installed by Santa Fe forces under the general jurisdiction of G. K. Thomas, system signal engineer, and under direct charge of E. R. Fraschiseur, signal engineer, Coast Lines. The major signaling equipment was furnished by the Union Switch & Signal Division of Westinghouse Air Brake Company.

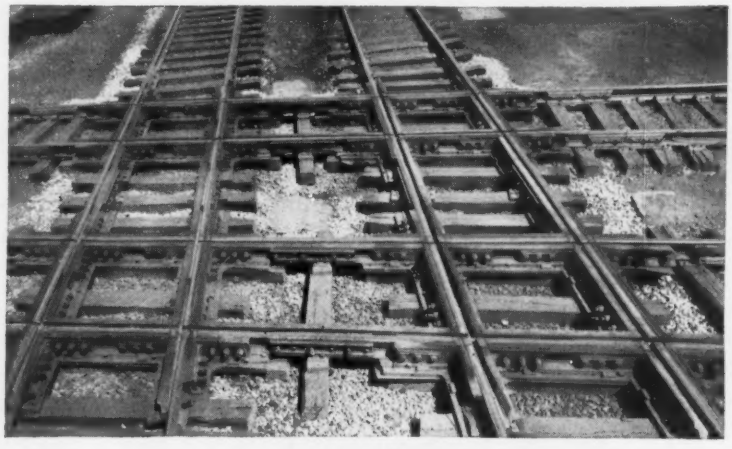


Crossovers enables three trains to meet at Sharon.

USS Quality Trackwork

reduced maintenance at this crossing

In 1953, this nest of four, 3-rail heat-treated crossings was installed in Ohio, by the Chesapeake and Ohio Railway Company. There has been a marked reduction in maintenance for this location since the time of installation —despite the fact that the crossings support vast tonnages and withstand the daily pounding of heavy-duty freight and high-speed passenger traffic.



This performance is evidence of United States Steel's activity in the development of heat-treated trackwork. The end-result of this development has been a rail with increased hardness and resistance to wear. The *production* methods of United States Steel are carefully controlled in order to maintain standards which traditionally have meant superior qualities for trackwork.

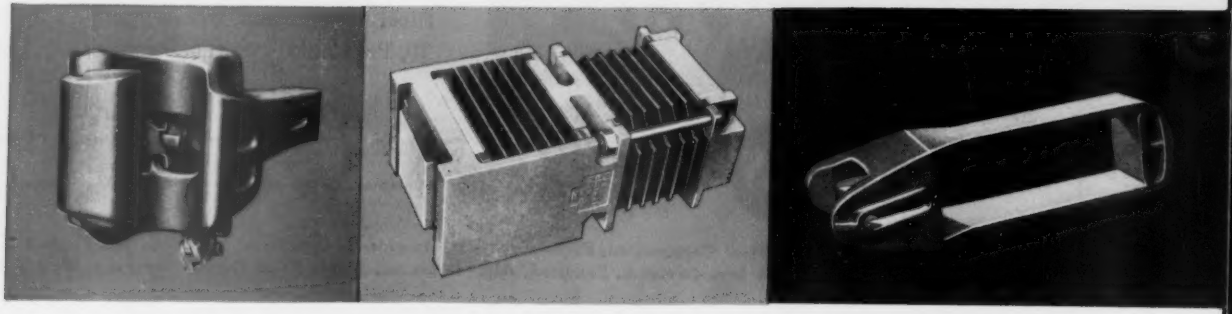
The extra care and effort that goes into the manufacture of switches, frogs and special track layouts make USS Quality Trackwork the finest you can buy. For complete data, photographs, and diagrams on the full line of USS Trackwork products, send for a free catalog, "USS TRACKWORK." Address your request to United States Steel Corporation, 525 William Penn Place, Pittsburgh 30, Pa. Contact our engineers at any time for assistance.

USS TRACKWORK

United States Steel Corporation, Pittsburgh · Columbia-Geneva Steel Division, San Francisco
Tennessee Coal & Iron Division, Fairfield, Ala. · United States Steel Export Company, New York

UNITED STATES STEEL

There's Improved Railroading with National Specialties



National Type E Couplers *National Type MF-400 Rubber-Cushioned Draft Gears* *National Y-40 Yokes*

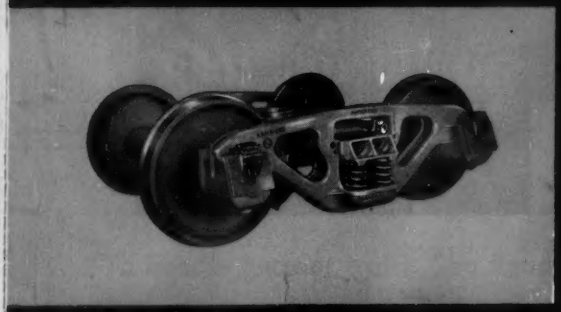
Example:

PACIFIC FRUIT EXPRESS

Pacific Fruit Express pursues a continuing program of upgrading its fleet of refrigerator cars. PFE's latest 2,000 car program leaves nothing to chance in protection of valued perishable commodities. 1,800 of these cars are of the latest design equipped with ice bunker and 200 with mechanical refrigeration units for protection of frozen foods . . . and many with National Rubber-Cushioned Draft Gears and National C-1 Trucks to protect PFE's rolling stock investment.

LEAGUED TO PROGRESS
P R I
MEMBER

NATIONAL MALLEABLE and STEEL CASTINGS COMPANY



National C-1 Trucks

Railway Division Headquarters
Cleveland 6, Ohio

International Division Headquarters
Cleveland 6, Ohio

Canadian Subsidiary
National Malleable & Steel Castings Company
of Canada, Ltd., Toronto 1, Ontario

Established 1868

COUPLERS · YOKES · DRAFT GEARS · FREIGHT TRUCKS · JOURNAL BOXES

THERMO KING

Mechanical Refrigeration

KEEPS "PIGGY-BACKS" COLD

in any temperature range . . . and does it automatically, economically, in any size trailer!

Burlington trailers are efficiently cooled with Thermo King refrigeration units. Mounting of unit is in nose of trailer

Thermo King mechanical refrigeration offers you dependable temperature control at the snap of a switch. Just set it and forget it. It is a rugged, trouble-free unit, perfected in 20 years of production by the world's largest maker of mechanical transport refrigeration. Thermo King costs less to buy, less to maintain, and less to operate than any other type of refrigeration.

Note these exclusive Thermo King features:

- fully automatic, including defrost
- cools or heats at snap of a switch
- self-contained single-package construction
- easily installed, replaced, or serviced
- money-saving automatic start-stop engine operation in response to temperature needs
- super capacity in wide variety of models

THERMO KING MAINTAINS THE ONLY NATIONWIDE SERVICE AND PARTS ORGANIZATION IN THE INDUSTRY

WRITE FOR FREE INFORMATION

☐ Send data. ☐ Send representative.

Name_____

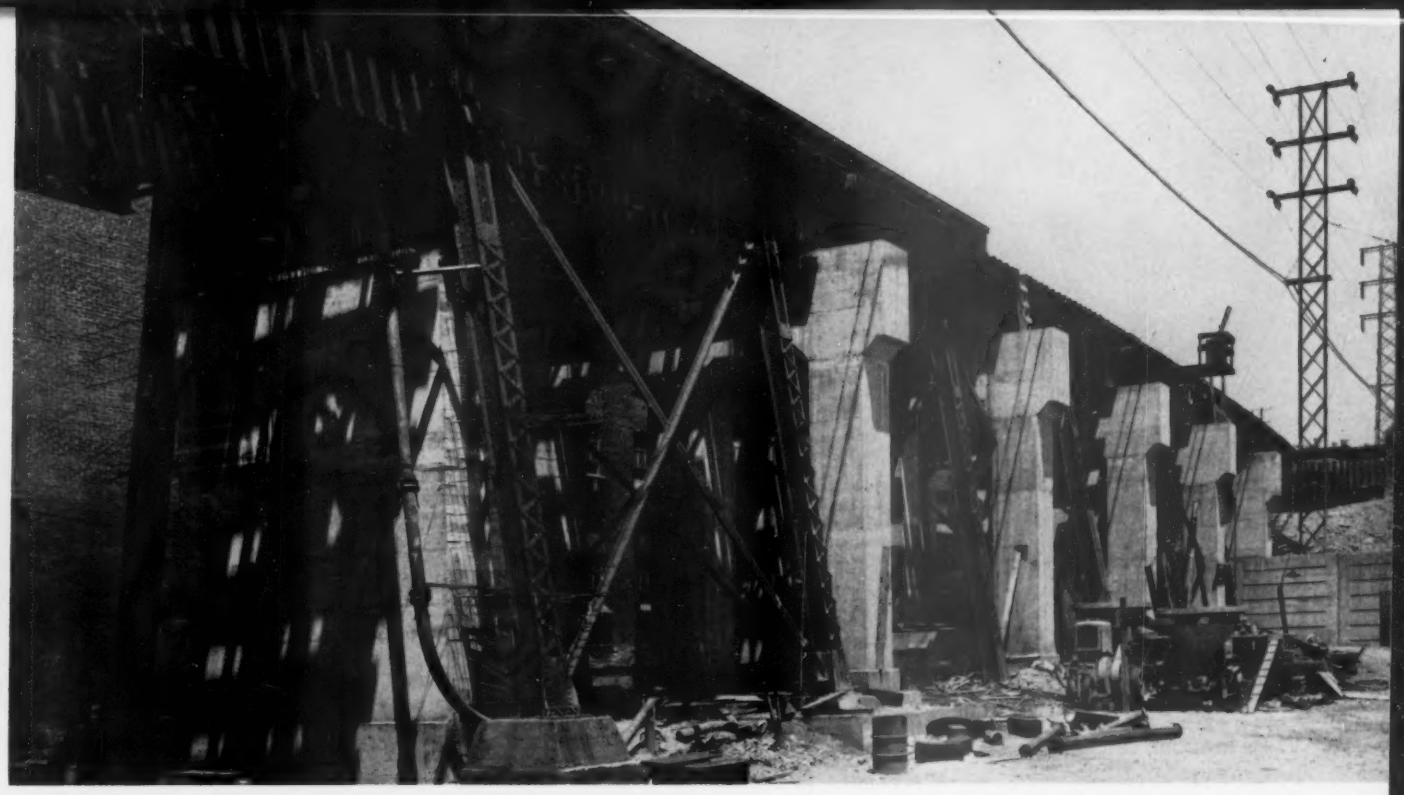
Company_____

Address_____

City_____ Zone_____ State_____

MAIL TODAY TO THERMO KING CORP.

44 South 12th Street Minneapolis 3, Minn.



Off with the Old . . .

STEEL SPANS at Penn Avenue were replaced with concrete-encased I-beams after construction of concrete bents.

. . . On with the New

SHEPPS DAM bridge across the Schuylkill is the biggest structure in the program. Note old bridge behind it.

To handle heavier traffic, the Reading is upgrading Belt Line bridges in Reading

STORY ON NEXT PAGE ►

With the old bridge . . .

CONCRETE piers and abutments on alinement paralleling old structure (left) are ready for steel to be transferred.

. . . to work from . . .

DECK GIRDER for new bridge, suspended between two locomotive cranes, has been

Bridges can now carry modern-day loads

The Reading belt line around the west side of Reading, Pa., connects with the main line at Klapperthal Junction on the south and at Belt Line Junction on the north. In recent years, the road has been engaged in a property improvement program in the vicinity, which has enhanced the importance of the belt line as a route for heavy eastbound freight trains.

Before the line could be utilized for this purpose to the fullest advantage it was necessary to overcome the important obstacle of four major bridges with a load rating of E-45. These included two bridges across the Schuylkill river (see map)—the Millmont bridge near the south end and the Shepps Dam bridge near the north end—a bridge across Tulpehocken creek, and the Penn Avenue viaduct in West Reading.

All these bridges were built about 1901. The spans across streams were all pin-connected deck-trusses and the Penn Avenue viaduct was of structural steel with the tracks being carried across four intersecting streets on plate-girder spans. Because of the relatively low rating of the bridges it had been necessary to maintain operating restrictions.

The program to provide stronger bridges on the Reading Belt Line got under way in 1950 when the Tulpehocken Creek bridge was replaced. Next, the Millmont bridge was renewed and then the strengthening of the 845-ft Penn Avenue viaduct was undertaken. The final step—and also the largest from the standpoint of cost—was the replacement of the Shepps Dam bridge. The order in which the work was carried out was determined largely by the condition of the old bridges.

Why They Used E-72 Loading

All the new bridges were designed for an E-72 loading, wtih full allowance for impact, using the AREA formula. Since the Reading is now fully dieselized, J. E. Good, engineer of bridges, was asked why the E-72 loading was adopted. "On this railroad we like to have a heavy dead load," he explained. "This way we reduce impact and vibration. In our opinion the relatively small wheels of the diesel provide as great impact forces where there are track irregularities as those caused by the heavier weight and unbalanced forces of the steam locomotive. Another consideration in causing us to use the E-72 loading is that train loads are getting heavier all the time, particularly the 70-ton ore 'Jennies,' with a length of only 27 ft over the couplers, and special heavy-duty cars which we have to be prepared to handle."

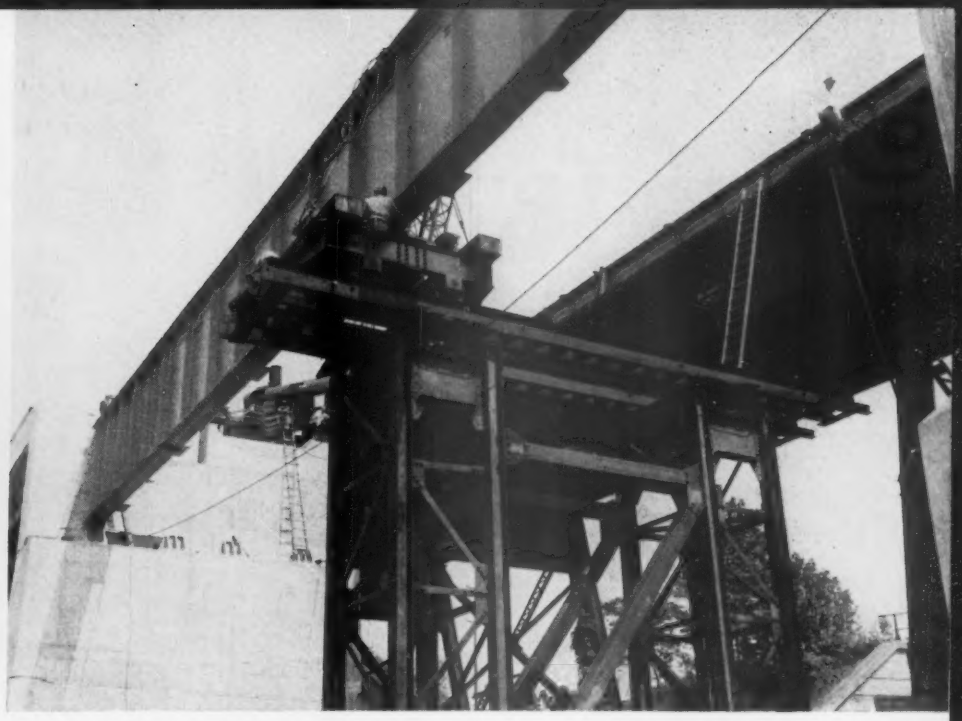
Although the Reading Belt is double track, two of the new bridges—the Millmont and Tulpehocken Creek structures—have only a single track. This arrangement was felt to be adequate since power switches, incorporated in a CTC system, were installed at both ends of each bridge. The fact that the railroad plans to signal both tracks for traffic in both directions also had a bearing in the decision to single-track the two bridges.

The main spans of all three new bridges across streams are of similar construction—deck-plate girders on concrete piers. When the necessary headroom is available this type of construction is the most economical and the fastest to erect, explained Mr. Good. All the bridges have solid concrete decks, he said, "because we like to have the advantages of ballasted track on our bridges."

Generally speaking the bridges are designed and constructed in accordance with conventional practice, although a number of features are unusual in some degree. For instance, Fabreeka pads were inserted between the bearing shoes and the bridge seats to prevent the shoes from cutting into the masonry. Also, longitudinal I-beams were hung from the undersides of the deck slabs outside the girders so that movable scaffolding, suspended from the I-beams mono-rail fashion, may be used by workmen when painting the bridges.

The abutments are of interest, too. In place of massive abutments with wingwalls the Reading prefers abutments of the "spill through" type. This construction involves the use of a short approach span

moved out into position on the parallel old bridge for transfer.



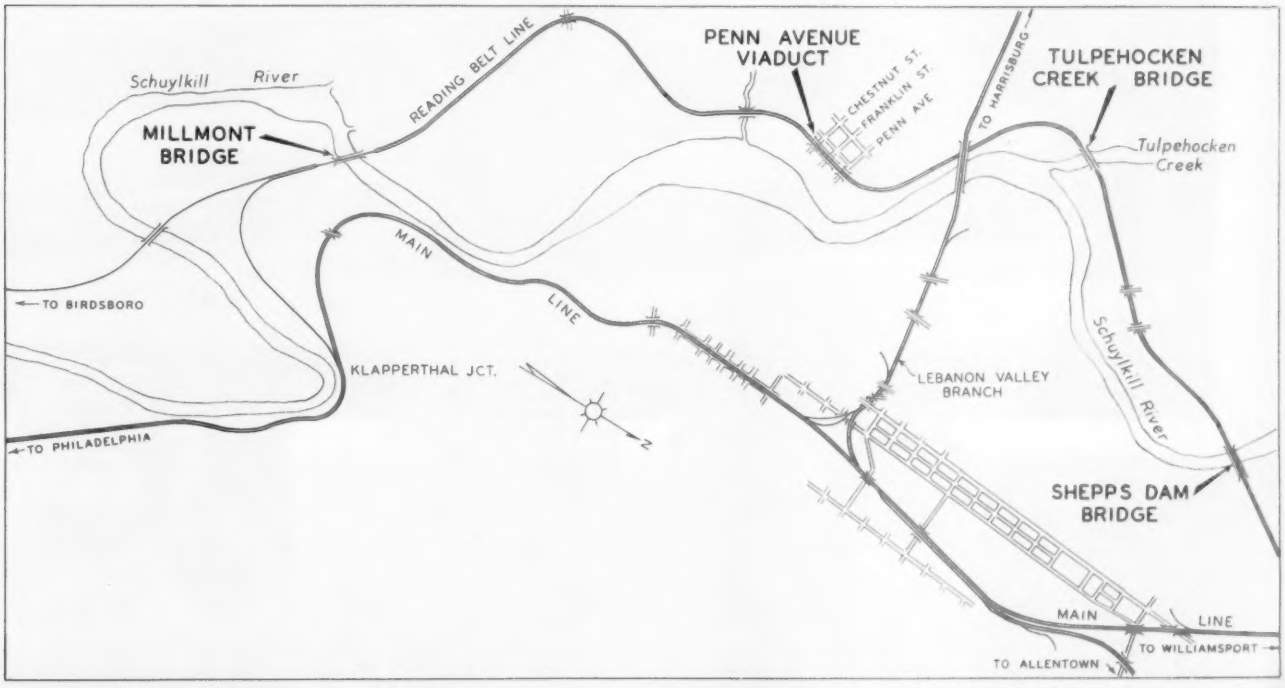
. . . the new goes together fast

DOLLY operating on runway supported by steel falsework carries new girder transversely to its final position.

with a relatively small abutment imbedded in the embankment. It is explained that this arrangement provides a relatively gradual transition from the resilience of the roadbed to the rigidity of the bridge, compared with the sudden transition that occurs with conventional abutments.

The Shepps Dam bridge is the longest of the three new bridges to be built across streams. It has seven girder spans, five 110 ft 6 in. and two 105 ft 3 in. long, and a 48-ft approach span at one end. The approach span consists of I-beams encased in concrete.

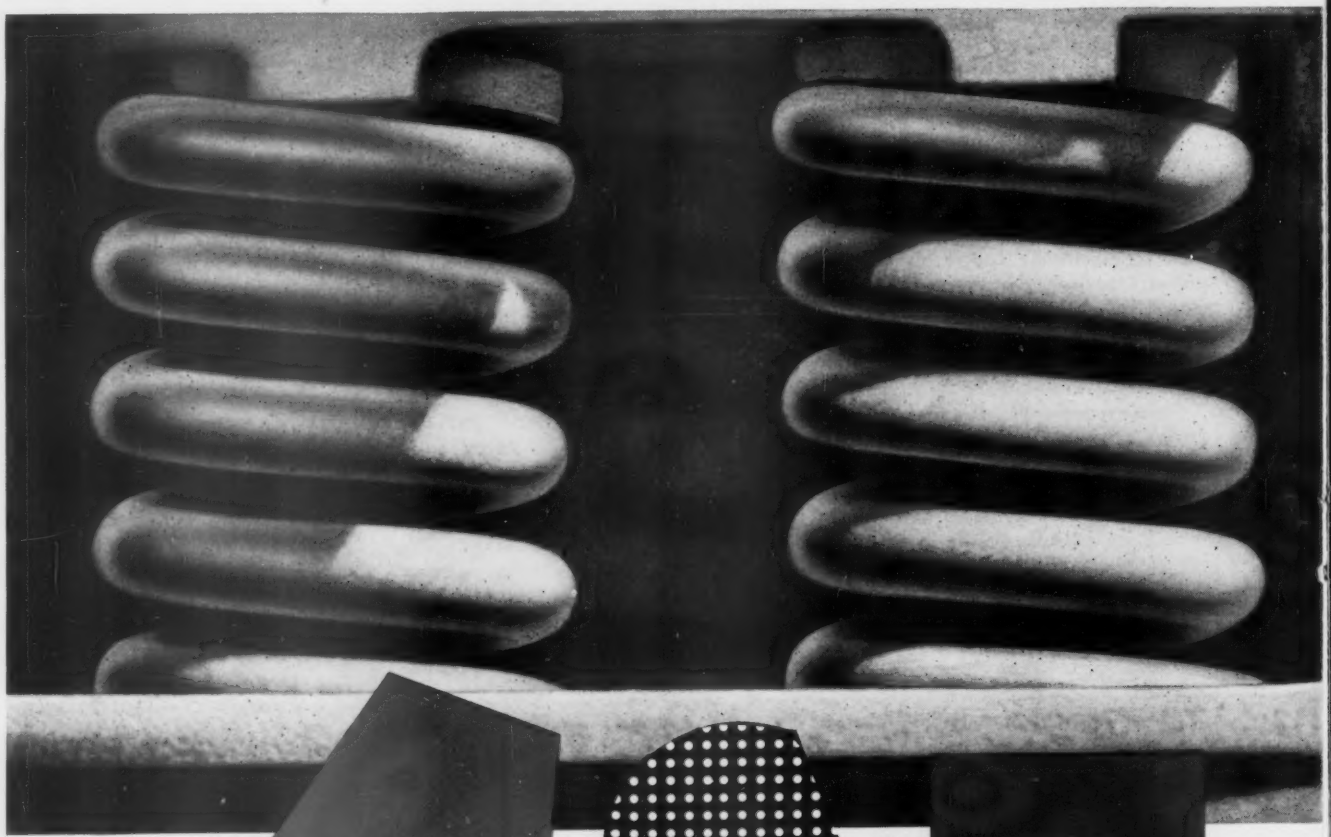
(*Continued on page 48*)



FOUR BRIDGES on the Reading Belt Line had to be strengthened before operating restrictions over the line could be lifted.

The spring that provides

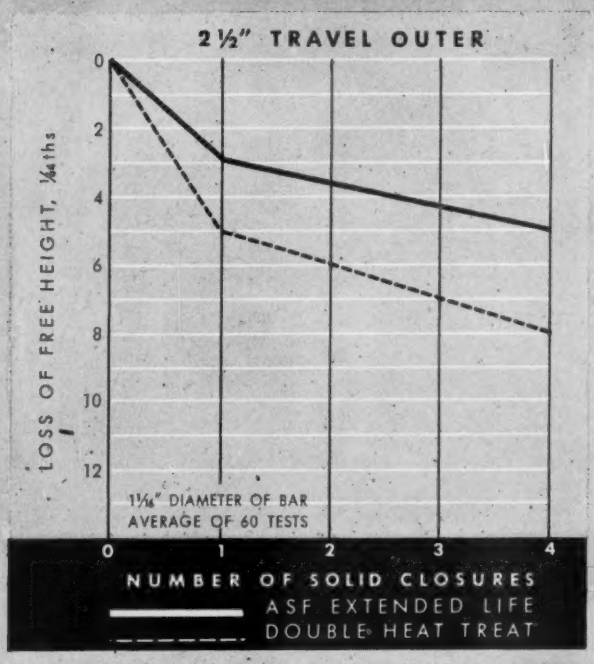
a soft ride...



A.T.E.

STAMPED TO PROTECT
P
R I
MEMBER

...longer!



Here is one of the really significant advantages of ASF Extended Life Springs. As shown by the graph, these springs have almost twice the resistance to permanent set—compared with conventionally heat-treated springs.

In many ways this is a more important advantage of Extended Life Springs than greater resistance to breakage. Any car man can quickly detect a broken spring . . . but the *unseen* cause of many a hard-riding car is the spring that is shirking its share of the load.

ASF Extended Life Springs are available at no increase in price. How much will they save on your road? It depends on your own operating conditions . . . but specifying these modern springs will give you an automatically higher return on your spring investment.

E-X-T-E-N-D-E-D L-I-F-E SPRINGS

A contribution to railroad progress through research by

AMERICAN STEEL FOUNDRIES

Prudential Plaza, Chicago 1, Illinois

Canadian Sales: International Equipment Co., Ltd., Montreal 1, Quebec

Being interviewed is W. W. Smith, Divisional Manager, Product Engineering. Grids in back are of Exide's exclusive Silvium. Those in front are ordinary alloys.

"All of these alloys had the same acid test"

At the Exide Laboratories—

Reporter: Was it a typical charge-discharge test normally used to test battery components?

Smith: Right. And the two positive plate grids with no visible signs of corrosion are Exide's patented Silvium alloy.

Reporter: How about the others—what alloys are they?

Smith: They're standard alloys used in other well-known makes of batteries. But they don't have Silvium's corrosion-resisting ingredients.

Reporter: Where is Silvium used?

Smith: In the positive plates of all Exide-Ironclad and many other Exide Batteries.

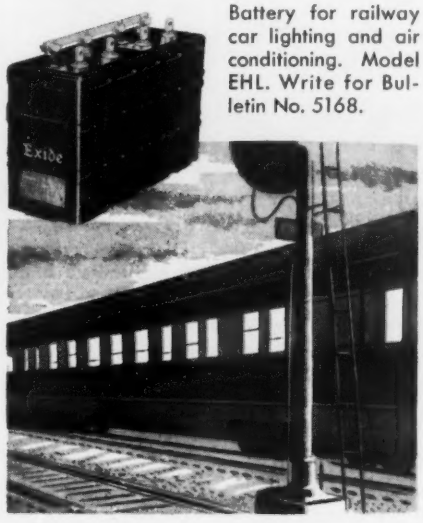
Reporter: How does it affect battery performance?

Smith: Every test we've made proves it stretches battery life because the grid resists corrosion—sometimes up to 100% longer.

Reporter: Obviously this is an important feature of the Exide-Ironclad.

Smith: Yes it is, but it's just one of many engineering details that contribute to its high capacity and long life.

Note to battery users: Whenever you order heavy duty batteries or the equipment that requires them, be sure to specify Exide-Ironclad. For detailed bulletin, write Exide Industrial Division, The Electric Storage Battery Co., Philadelphia 2, Pa.



Battery for railway car lighting and air conditioning. Model EHL. Write for Bulletin No. 5168.

Battery for railway diesel starting. Exide-Ironclad Model MVD. Write for Bulletin No. 5348.

Exide®

THE ELECTRIC STORAGE BATTERY COMPANY

TELETYPE celebrates 50 years of NEW ideas!

EARLY TELETYPEWRITER

TELETYPE MODEL 28 PRINTER

A new idea—the first really practical telegraph printer—put the company now known as the Teletype Corporation in business in 1907. Our first printer was field tested on a railroad. And—since we have stressed research from the beginning —new ideas to aid the railroads have been coming from our laboratories ever since.

Today, equipment made by Teletype flashes railroad switch lists, block reports, set-out and pick-up reports, diversion orders and reports, manifest and passing reports . . . and regular message traffic. In addition, it transmits and reproduces text and punched tape for office automation . . . and simplifies the handling of many other modern railroad "chores."

Our help in solving railroad communication problems is always available. You're welcome to visit us, or write to Mr. I. C. Zager, Railroad Communication Consultant, Teletype Corporation, Dept. RA8 4100 Fullerton Avenue, Chicago 39, Illinois.

TELETYPE®

TELETYPE CORPORATION

SUBSIDIARY OF

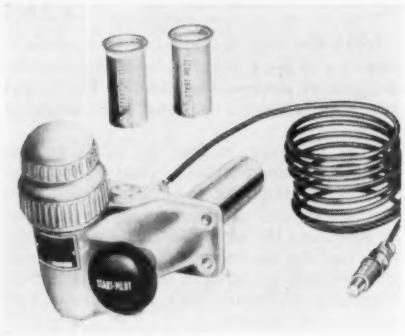
Western Electric Company

INCORPORATED

1957 Golden Anniversary Year

RAILWAY AGE
The Industry's Newsweekly

WHAT'S NEWS in Products

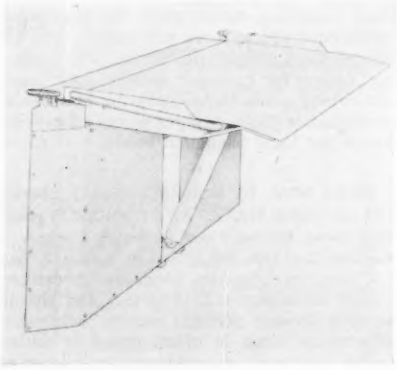


Starting Capsules

. . . for cold diesels

The "Start Pilot," a diesel engine starting device, and aluminum multi-start capsules are said to be used extensively in Europe, eliminating the practice of running some engines constantly at night or during cold periods to assist other engines in their start-up period.

The unit's double action air pump allows the operator to follow through on the engine until continuous firing has been achieved. On certain types of engines it has been found advisable to use two Start Pilots, mounted on opposite sides of the cylinder block. *Start Pilot Corporation, Dept. RA, Mineola, N.Y.* •

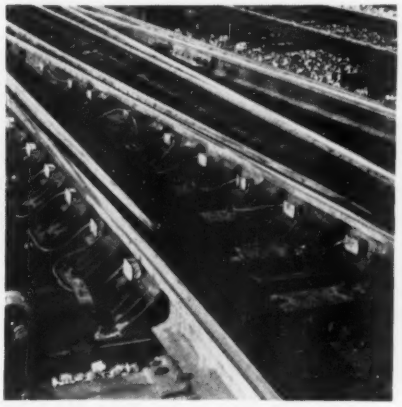


Mobile Dock Ramp

. . . rides its own rails

A new 10,000-lb capacity mobile dock ramp has been designed to ride its own rails to any spot along a railroad dock, making spotting cars unnecessary. The "Rail-O-Matic" device rides on a single dock-side rail, which can be mounted on an existing dock or on new construction. One foot control raises or lowers the hydraulic ramp into any position; a safety lock anchors the ramp to the dock to prevent shifting. After loading or unloading, one man can move it to the next loading position—a 30-second job, according to the manufacturer.

The approach plate carries all the weight of traffic, reportedly putting no strain on wheels or rail. The platform is fabricated from heavy shapes welded into one compact unit; the top deck of non-skid floor plate has safety curbs on two sides. Power unit for the ramp has self-contained motor and pump. *Wayne Pump Company, Dept. RA, Salisbury, Md.* •



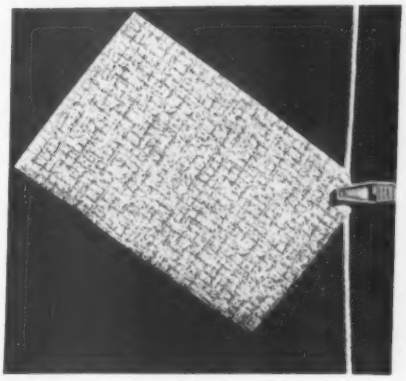
Electric Switch Heater

. . . has low power operation

Three operational advantages of the new Elec-Time switch heater are: (1) maximum radiating surface to rails; (2) uniform heat distribution to ends of switch; and (3) low power operation. Elec-Time switch heater comprises a series of heater plates, 15 in. long and 3 in. wide of stainless steel, adaptable to all size switches.

A 16½ ft switch, for example, requires 16 heater plates, six of which can operate at 500 watts and ten at 125 watts, wired in series, with a low total demand of 4.25 kw/hr. Power is continually variable from full power to 25 per cent of full power under all operating conditions.

Elec-Time switch heater assemblies can be applied to any size switch lengths. Heater plates are individually replaceable, and installation does not require any grinding of switch point. Lower operating voltages increases safety. *Rails Company, Dept. RA, 187 Maplewood Ave., Maplewood, N. J.* •



Upholstery Material

. . . with elastic backing

A new line of textured Elastic Naugahyde upholstery, called Coven, has elastic fabric backing, facilitating use in upholstering furniture with contours. The line is being offered in eight multiple print colors—coral, grey, mocha, olive, cerulan, lemon, cantaloupe and green. The material is 54 in. wide. *United States Rubber Company, Dept. RA, 1230 Avenue of the Americas, New York 20.* •

Extension Cord

. . . for "Over-the-floor" use

The "Electriduct" extension cord can be applied to any floor, cemented permanently if necessary, and painted to match the floor. Insulated with rubber, it is rated 15 amp, 125 volts. The assembly has a molded plug on one end attached to a 2-ft No. 16 AWG 2-conductor rip cord and a double outlet receptacle molded on the other end. *CMG Industries—Ideas, Inc., Dept. RA, 615 South Second, Laramie, Wyo.* •

Current Publications

ANNUALS

JOINT EQUIPMENT COMMITTEE [REPORT ON] COSTS OF RAILROAD EQUIPMENT AND MACHINERY, July 1, 1957. 22 pages. Association of American Railroads, Finance, Accounting, Taxation & Valuation Department, Transportation Bldg., Washington 6, D.C. Free.

•

RAILROAD INFORMATION, 1957 Edition. 95 pages. Association of Southeastern Railroads, 912 17th st., N.W., Washington 6, D.C. Free.

•

BOOKS

LET'S OPERATE A RAILROAD, by L. E. Roxbury. 352 pages, illustrations, drawings. High-Iron Publishers, Warwick, Va. $4.50.

This is a book for beginning railroaders, railfans and serious-minded model railroaders. Mr. Roxbury hopes it will be particularly helpful to beginning railroaders by giving added meaning and importance to the operating rules. Three appendices contain operating rules, train-order rules and a glossary of terms. The sub-title, "A textbook on operational aspects of railroading and of the men who perform the fascinating job, with a measure of railroadiana inserted," accurately describes the book.

•

THE EFFECTS OF THE ST. LAWRENCE SEAWAY ON GRAIN MOVEMENTS, by Joseph R. Hartley. 252 pages, maps, tables. Bureau of Business Research, Indiana University School of Business, Bloomington, Ind.

Made in cooperation with the Chicago Board of Trade, this study discusses the structure of the world grain trade; the nature of the seaway project; general factors affecting seaway grain rates and shipping services; operation of large grain vessels at seaway drafts; feasible rates for grain via the waterway; grain territory tributary to the seaway; cost advantage of the seaway for grain movement, potential changes in grain movements; and impact of the seaway.

•

JAY GOULD; HIS BUSINESS CAREER, 1867-1892, by Julius Grodinsky. 627 pages, maps. University of Pennsylvania Press, 3436 Walnut sts., Philadelphia 4. $10.

This volume is not a biography of Jay Gould the man, but rather an examination of the policies of a leading trader, railroad builder, businessman and capitalist.

In analyzing Jay Gould's rise to business eminence, Dr. Grodinsky presents an absorbing panorama of the railroad industry during an age of individual enterprise. The competitive battles, the clashing personalities, the rival and conflicting corporate and managerial policies, the tremendous risks and the resultant gains and losses, the legal, corporate, and stock-market clashes that accompanied these competitive rivalries, as illustrated by Gould's career and the careers of his many associates, are vividly described. In addition, the leading business figures of the day — such men as Cyrus Field, Russell Sage, J. P. Morgan, J. M. Forbes, C. E. Perkins, Henry Villard, Cornelius Vanderbilt, W. H. Vanderbilt, and Moses Taylor, among many others — appear as they cooperate with or struggle against Gould. Among the companies with which he was closely identified were the Erie, Union Pacific, Wabash, Missouri Pacific, Western Union and Manhattan Elevated.

MANAGEMENT CONTROLS OVER EQUIPMENT UTILIZATION. 119 pages, illustrations, charts, drawings. Railway Systems and Procedures Association, 357 Union Station, Washington 2, D.C. $5.

The subject for discussion at the 1957 spring meeting was management controls over equipment utilization. This volume of Proceedings contains the papers and reports presented there (Railway Age, April 8, p. 9; May 6, p. 52). They were as follows: the challenge of better car utilization to railroad management; Southern Pacific's expanded box car distribution program using electronic data processing equipment to improve utilization of box cars (Railway Age, April 8, p. 34); report on the workshop on grading and marking of cars; industry's approach to improvement of car utilization; dollars and cents value of improved car utilization; motion picture on production control; a panel discussion on how production controls in programmed repairs can improve car utilization; improved car utilization from better repair track procedures (Railway Age, June 24, p. 24); and an operating man looks at equipment utilization.

•

TRAINS, by Robert Selph Henry. Electronic Age Edition. 152 pages, illustrations, end-paper maps. Bobbs-Merrill Company, 730 North Meridian st., Indianapolis 7. $3.95.

Now in its ninth large printing, this book, largely by means of pictures, tells one of the great stories of our nation's history— the harnessing of steam, the first crude railroads, the tunnels that cut through the Allegheny barrier, the race across the open Middle West and thence across the deserts and through the Rockies to the Pacific. A new chapter on electronics on the rails has been added to this edition. Highlights are radar-equipped yards for automatic car sorting, electronic rather than contact safety devices, and closed-circuit TV central seat reservation systems. The latest engineering progress in coach design and gas-turbine engines is reviewed in pictures and story.

•

COMBUSTION ENGINE PROGRESS. 110 pages, illustrations, drawings. Tothill Press Ltd., 33 Tothill st., London, S.W.1. 5 shillings.

A survey of recent developments in the design of internal combustion engines published concurrently with the International Internal Combustion Engine Congress at Zurich, Switzerland, June 17-25. Included are lists of manufacturers of diesel engines, gas turbines, pressure chargers, and gas generators, throughout the world.

•

THE TRANSPORTATION CORPS; OPERATIONS OVERSEAS, by Joseph Bykofsky and Harold Larson. 671 pages, illustrations, maps. Office of the Chief of Military History, Department of the Army. Available from Government Printing Office, Washington 25, D.C. $6.50

With this, the latest volume to appear in the series U.S. ARMY IN WORLD WAR II, the Army completes its trilogy covering the mammoth task of Army transportation involved in prosecuting global warfare. The new volume focuses attention on the Transportation Corps' activities overseas, whereas the first two volumes concentrated on the organization, functions, and relationships of the Corps, its role in effecting movements within, from, and to the zone of interior, and its training and supply problems.

Recounting deficiencies as well as accomplishments, the authors spotlight the role played by transportation in the conduct and support of military operations during World War II by discussing the major transportation activities in each of the several oversea commands.

In addition to a number of excellent photographs and maps, the book contains a list of abbreviations, a glossary of code names and a glossary of technical terms.

•

FILMS

IDEAS AND FILM. Sound, color film. Available on loan from all Bell & Howell audio-visual dealers; also available by purchase from Tele-Cine Film Studios, 100 South Northwest Highway, Park Ridge, Ill. $79.95.

Film illustrates various industrial applications of motion pictures. Actual examples of the use of telephoto, microscopic, time-lapse and high-speed cinematography were used in producing the film. Included are sequences showing the shattering of a lamp bulb in slow motion, action of a guided missile from launching to landing, and an industrial time and motion analysis.

•

FROM THE MANUFACTURERS

MAGNUS R-S JOURNAL STOPS; DESIGN AND PERFORMANCE DATA. 20 pages, illustrations, drawings. Magnus Metal Corporation, Dept RA, 111 Broadway, New York 6. Free.

Covers the complete record of all installations on freight cars to May 15 of this year.

•

RCA "IDEA" KIT. Available to users of RCA equipment on letterhead request from Department 111, Building 15-1, Radio Corporation of America, Dept. RA, Camden, N.J.

This is an advertising and sales promotion "idea" kit designed to help users of RCA two-way radio systems attract maximum attention to their radio-controlled services. It includes suggested advertising, publicity, and sales promotion programs and material for use in initial announcement of new mobile radio installations, and for follow-up sales promotion of the advantages of radio service to customers.

Included are stories for local newspapers; a catalog of RCA-prepared ads available in mat form; sales promotion literature for inclusion with outgoing mail; and colorful decals, for truck mounting, which carry the inscription "radio-equipped to serve you better". The kit also provides samples of effective sale promotion folders for customer mailing; letterheads and calling cards highlighting the new radio-controlled services; and suggested advertising inserts for local telephone books.

•

HERE'S HOW TO DOUBLE EXPECTED SERVICE LIFE OF TIMBER BRIDGES AND TRESTLES. 11 pages, illustrations. Osmose Wood Preserving Company of America, Dept. RA, 980 Ellicott st., Buffalo 9. Free.

Covers basic causes of decay in existing timber structures and what can and should be done about it. Subjects include background of treating wood in place; decay in timber bridge structures; materials and techniques of bridge treating; economics of in-place treatment; important considerations when choosing a service; and how to plan a program for your company.

•

PIPE FACTS, Special Issue, No. 9. 11 pages. E.I. du Pont de Nemours & Co. (Dept. RA), Polychemicals Department, Wilmington 98, Del. Free.

This special issue has been prepared to tell the story of the use of "Alathon" 25 polyethylene resin for flexible pipe. It covers the advantages of polyethylene pipe in general, factors affecting service life, and burst strength data.

Facts & Figures AT A GLANCE

Ore Tonnage Up in June

The American Iron Ore Association reports that ore shipments during last June showed a 658,060-ton gain over the same month of 1956 to bring the July 1 cumulative tonnage to 30,311,649—855,636 tons under the total on the date last year. Loadings to July 1 were as follows:

Iron-Ore Shipments, Gross Tons (railroad weights)

Port and Dock	Monthly		Cumulative to	
	June '57	June '56	July 1, '57	July 1, '56
Escanaba, C&NW	903,993	827,536	2,471,655	2,028,478
Marquette, DSS&A	106,550	80,248	129,799	97,725
Marquette, LS&I	646,380	674,205	1,272,493	1,710,614
Ashland, C&NW	366,546	385,532	726,564	844,108
Ashland, Soo Line	289,753	181,473	507,523	359,384
Superior, GN	4,297,891	4,510,668	9,290,778	10,554,043
Superior, NP	222,584	202,201	418,192	454,456
Superior, Soo Line	83,450	65,068	221,641	183,300
Duluth, DM&IR	2,821,496	2,456,082	6,368,502	6,242,620
Two Harbors, DM&IR	2,555,183	2,371,849	6,047,281	6,224,721
Silver Bay	753,622	606,876	1,666,808	1,375,982
U.S. Ports, Total	13,047,448	12,361,738	29,121,236	30,075,431
Michipicoten, Algoma Cen.	161,500	153,781	311,763	255,361
Port Arthur, CNR	388,428	423,797	878,650	836,493
Canadian Ports, Total	549,928	577,578	1,190,413	1,091,854
Grand Total	13,597,376	12,939,316	30,311,649	31,167,285
Increase from year ago	658,060	.....	.....	.....
Decrease from year ago	.....	.....	855,636	.....

Dividends Declared

ATLANTA & WEST POINT.—$1, paid August 1 to holders of record July 24.

DELAWARE, LACKAWANNA & WESTERN.—12½¢, payable September 16 to holders of record August 30.

DENVER & RIO GRANDE WESTERN.—62½¢, quarterly, payable September 16 to holders of record September 6.

GREAT NORTHERN.—75¢, quarterly, payable September 16 to holders of record August 21.

GULF, MOBILE & OHIO.—common, 50¢, quarterly, payable September 9 to holders of record August 19; $5 preferred, $1.25 quarterly, payable March 10, 1958 to holders of record February 14, 1958.

INTERNATIONAL OF CENTRAL AMERICA.—5% preferred, $1.25, accumulation, payable August 15 to holders of record August 6.

MAINE CENTRAL.—5% preferred, $1.25, accumulation, payable September 3 to holders of record August 16.

NASHVILLE, CHATTANOOGA & ST. LOUIS.—$1, quarterly, payable August 16 to holders of record August 5.

READING.—4% 1st preferred, 50¢, quarterly, payable September 12 to holders of record August 22.

SOUTHERN.—70¢, quarterly, payable September 13 to holders of record August 15.

WESTERN OF ALABAMA.—$4 paid August 1 to holders of record July 24.

ICC Authorizations

GREENVILLE & NORTHERN.—The ICC has authorized Samuel M. Pinsly, president of the Claremont & Concord and several other New England rail properties, to acquire control of this road through purchase of capital stock.

Organizations

TRAFFIC CLUB OF ST. LOUIS.—New officers are: President Hugo Wanninger, vice-president, Anheuser Busch, Inc.; first vice-president, Frank A. Frawley, division freight agent, Baltimore & Ohio; second vice-president, Melvin E. Iten, freight traffic manager, Monsanto Chemical Company; third vice-president, O. H. Telhorst, regional manager, Republic Carloading and Distributing Company; fourth vice-president, Frank Becht, general traffic manager, Falstaff Brewing Corporation; fifth vice-president, Nick Laffler, general sales manager, Freightways, Inc., and secretary and treasurer, Mel Walsh, traffic manager, Ruberoid Company.

WESTERN ASSOCIATION OF RAILWAY TAX COMMISSIONERS.—Newly elected officers are: President, R. W. Roach, real estate and tax commissioner, Rock Island; vice-presidents, L. A. Grotewohl, commissioner of taxes and insurance, Santa Fe; H. A. Knudsen, eastern supervisor, property taxes, Northern Pacific; and P. J. Ward, land and tax commissioner, Frisco; secretary-treasurer, V. L. Sides, general tax agent, Illinois Central.

PURCHASING AGENTS' ASSOCIATION OF ST. LOUIS.—William M. Bridwell, general purchasing agent, General Steel Castings Corporation, Granite City, Ill., elected president.

STEEL STRUCTURES PAINTING COUNCIL.—John D. Keane appointed director of research and executive secretary, 4400 Fifth avenue, Pittsburgh. Mr. Keane was formerly in charge of chemical engineering research at Armour Research Foundation.

FIRE PROTECTION AND INSURANCE SECTION, AAR.—Annual meeting will be held October 15-17 at the Sheraton Hotel, Chicago.

MID-WEST SHIPPERS ADVISORY BOARD.—Next regular meeting will be held October 22-23 at the Pere Marquette Hotel, Peoria, Ill.

May Accidents

The ICC has made public its Bureau of Transport Economics and Statistics' preliminary summary of railroad accidents for May and this year's first five months. The compilation, subject to revision, follows:

Item	Month of May 1957	5 months ended with May 1957
Number of train accidents*	328	1,727
Number of accidents resulting in casualties	22	167
Number of casualties in train, train-service and nontrain accidents:		
Trespassers:		
Killed	58	261
Injured	53	221
Passengers on trains:		
(a) In train accidents		
Killed	..	..
Injured	13	101
(b) In train-service accidents		
Killed	..	4
Injured	103	547
Employees on duty:		
Killed	13	66
Injured	845	4,704
All other non-trespassers:		
Killed	121	583
Injured	321	1,972
Total—All classes of persons:		
Killed	182	914
Injured	1,335	7,545

*Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former caused damage of more than $750 to railroad property in 1957. Only a minor part of the total accidents result in casualties to persons, as noted above.

**Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties *for all classes of persons including both trespassers and nontrespassers*, were as follows:

Persons:		
Killed	105	566
Injured	260	1,683

Technical Tidings

Selected from August Railway Monthlies

Pre-aging of vacuum tubes can save life and may extend service life of railroad radio equipment. This and tube-testing techniques are described in this month's Railway Signaling & Communications.

●

How many roller bearings? What does AAR lubricator action mean? What's ahead in motive power? Are there ways to avoid spilling oil at locomotive fueling stations? What will next year's interchange rule revisions be? Will air filter and diesel fuel tests be standardized? Can calcium-grid batteries find a place in railroading? What did the AAR piggyback tie-down study find? These and many other timely topics are covered in August Railway Locomotives and Cars' reports on AAR Mechanical Division and Electrical Section meetings.

●

New Zealand Railways built an important line change incorporating a tunnel 5½ miles long. Laying the track in the tunnel by usual methods would have meant a long delay in placing the new line in service. A Railway Track & Structures article tells how they solved the problem by assembling the track outside the tunnel in 351-ft lengths which were hauled into the tunnel by ingenious methods including the use of traveling gantries.

●

Savings of up to $80,000 yearly are accruing to the Terminal Railroad in St. Louis as a result of consolidating the control of three interlockings into one new plant. How it was done is told in this month's Railway Signaling & Communications.

●

Canadian Pacific operates 173 streamlined coaches, sleepers, diners and dome cars which are maintained under a program aimed at keeping them on the road. The Canadian Pacific's progressive preventive maintenance plan is similar to that used by many lines for diesel locomotive operation. The August issue of Railway Locomotives and Cars tells how CPR has adapted this to passenger car maintenance and tells why the railroad expects these cars should never show up in its backshops.

●

When renewing ties on open-deck steel bridges, Rock Island bridgemen don't follow the usual practice of inserting the new ties one by one; they assemble them on the ground in panels which are moved into position as units by a crane. Railway Track & Structures tells how it's done.

People in the News

ANN ARBOR.—Robert L. Fehlber, acting freight traffic manager, Toledo, Ohio, appointed traffic manager there, succeeding **Frank G. Maxwell,** retired. The following promotions announced: **E. L. Costello,** from general agent, Toledo, to general freight agent there; **G. J. Bradner,** from assistant general freight agent, Toledo, to general freight agent—rates and divisions there; **A. D. Thorp,** from commercial agent, Manistique, Mich., to general agent, Toledo; **G. E. Strange,** from division freight agent, Owosso, Mich., to division freight and industrial agent there; **P. A. Servais,** from general agent, Green Bay, Wis., to assistant general freight agent there, and **J. V. Ryan,** from general agent, New York, to general eastern agent at that point.

CANADIAN PACIFIC. — L. B. George, assistant chief of motive power and rolling stock, system, Montreal, appointed chief of motive power and rolling stock, succeeding **F. A. Benger,** who retires July 31. **W. D. Dickie,** works manager, Angus shops, Montreal, succeeds Mr. George. **C. W. Parker,** special engineer, motive power department, named chief mechanical engineer. **H. W. Hayward,** engineer of standards and methods, office of chief of motive power and rolling stock, replaces Mr. Dickie.

CANADIAN NATIONAL.—Howard C. Grayston, special assignments assistant under the vice-president of operation, appointed assistant vice-president, operations, at Montreal. **J. G. Small,** assistant transport economist at Moncton, appointed transport economist for the western region, at Winnipeg.

CHARLESTON & WESTERN CAROLINA.—W. Thomas Rice elected president, succeeding **C. McD. Davis,** retired.

J. W. Flowers appointed superintendent at Augusta, Ga., succeeding **G. F. Tedards,** retired.

CHESAPEAKE & OHIO.—V. T. Shrieves appointed assistant superintendent transportation, Newport News, Va.

J. D. Newman named resident engineer, Presque Isle, Ohio. **W. F. Altizer** appointed assistant engineer, Detroit, Mich., succeeding **K. C. Morriss,** named assistant division engineer, Ashland.

Albert J. Sicnolf, assistant to director of public relations, responsible for community relations, at Cleveland, appointed public relations manager, Eastern region, at Richmond, Va.

R. Joseph Rappold appointed general agent at Charleston, W. Va., succeeding **N. S. Stark,** retired.

CHICAGO & EASTERN ILLINOIS.—B. H. Oakey, general agent, Salt Lake City, Utah, transferred to Minneapolis, to succeed **Charles T. Finley,** who retired July 31.

CHICAGO & NORTH WESTERN.— Gens F. Cermak, assistant director of industrial development, Chicago, promoted to director of industrial development.

John Cablk appointed assistant diesel supervisor, Chicago.

Harold A. Hoppe appointed assistant general freight agent-rates, Chicago.

CHICAGO GREAT WESTERN.—William Blocker appointed assistant freight traffic manager, Chicago.

CLINCHFIELD.—Paul C. Alford, general freight agent, rates, has retired. **E. P. Cobb,** assistant general freight agent, appointed assistant traffic manager, rates and divisions, and **J. J. O'Connor** appointed assistant traffic manager, sales and service, his former position of general freight agent, sales and service, having been abolished. **C. S. Belcher,** assistant general freight agent, appointed general freight agent, rates and divisions. He has been succeeded by **G. C. Starr. G. W. Gwinn, Jr.,** appointed assistant to general freight agent, succeeding **C. H Hager,** promoted. All have headquarters at Erwin, Tenn.

GRAND TRUNK WESTERN.—R. J. Martin, acting superintendent car ferries, appointed superintendent car ferries at Milwaukee, Wis.

GULF, MOBILE & OHIO.—Morris D. Carothers, assistant chief engineer at Bloomington, Ill., has retired. **Wallace H. Stumm** and **Robert Hellweg,** assistant division engineers at Bloomington, appointed regional engineer and assistant regional engineer, Northern region, respectively, with same headquarters.

ILLINOIS CENTRAL.—Ernest J. Carr, assistant vice-president, Chicago, elected traffic vice-president there, to succeed **Robert A. Trovillion,** who retires September 1. Mr. Carr's successor is **Howard S. Powell,** general traffic manager, Chicago, who in turn is replaced by two general freight traffic managers, **Carl A. Larson** in charge of freight rates and service and **Charles A. Sublett** in charge of freight rates.

LONG ISLAND.—Joseph J. Ortlieb appointed research engineer, at Jamaica.

MARYLAND PORT AUTHORITY.—Frederick H. N. Heemann, assistant traffic and transportation director, Baltimore Association of Commerce, appointed transportation economist, Maryland Port Authority.

MINNEAPOLIS & ST. LOUIS.— Kenneth H. Mullin named agricultural agent.

MISSOURI PACIFIC.—Opened a new traffic agency at Jacksonville, Fla. **Kenneth A. Jaeckel,** former traffic representative, Atlanta, Ga., named general agent.

NEW YORK CENTRAL.—James J. McTernan, Jr., formerly comptroller of Studebaker Packard Corporation, appointed assistant comptroller.

F. J. Kossuth, supervisor car maintenance at New York, appointed assistant general mechanical superintendent — car. He has been succeeded by **A. F. Hagy,** assistant supervisor car maintenance, who in turn has been succeeded by **V. F. Kania,** general inspector, all located in New York. **F. L. Hoffman,** master mechanic at Harmon, N. Y., appointed general superintendent of the diesel-electric shop there.

J. R. LeFauve appointed terminal trainmaster at East Buffalo, N. Y.

NICKEL PLATE.—Daniel W. O'Leary appointed general agent at St. Louis, succeeding **A. D. Llewellyn,** deceased.

NORFOLK & WESTERN.—W. O. Kesler, comptroller's agent, promoted to assistant to comptroller. **F. B. Stiff,** chief disbursement agent, and **H. P. Andrews,** comptroller's agent, promoted to general accountants.

READING.—Herbert J. Lobb, Jr., general freight agent, named assistant freight traffic manager, succeeding **Laban B. Schlosser,** retired. The following appointments also announced: **Joseph F. Leibrandt,** assistant general freight agent to general freight agent; **John D. Grier,** coal freight agent, to assistant general freight agent; **Ralph G. Dunn,** coal freight agent-sales, to coal freight agent-rates; **James I. Smith, Jr.,** commercial coal agent, New York, to coal freight agent-sales; **Francis J. Gormley,** assistant to coal traffic manager, to commercial coal agent, New York; and **Stanley E. Maute,** coal traffic representative, to assistant to coal traffic manager.

RICHMOND, FREDERICKSBURG & POTOMAC.—Albert C. Kitchen, manager, personnel office, named personnel assistant.

SANTA FE.—C. B. Kurtz, superintendent, Western division, Dodge City, Kan., transferred to the New Mexico division, Las Vegas, N. M., succeeding **W. H. Jones,** who retired August 1. **F. L. Eiterman** named to replace Mr. Kurtz.

SOO LINE.—Walter O. Solberg, assistant superintendent transportation, Minneapolis, advanced to superintendent transportation here, to succeed **W. M. Christel,** who will continue in an advisory capacity on transportation matters.

UNION PACIFIC.—Walter A. Graydon, public relations assistant, appointed director of press, radio and television relations, Northwestern district, Portland, Ore., to succeed **James L. Hays,** who retired July 31. **George J. Skorney** named press relations assistant.

UNITED STATES DEPARTMENT OF COMMERCE—Edward Margolin, who has been with the Department since 1948 as a transportation specialist and economist, appointed assistant to Under Secretary of Commerce for Transportation.

WABASH. — Joseph N. Sailor, superintendent, Decatur division, Decatur, Ill. and **Eager W. Nixon,** superintendent, Moberly division, Moberly, Mo., appointed assistant general managers—operations, of this road and the Ann Arbor, St. Louis. **Raymond Fountain,** assistant superintendent transportation, St. Louis, succeeds Mr. Sailor, and in turn is replaced by **William G. Blades,** trainmaster, Moberly. Mr. Nixon's successor is **Leonard K. Brown,** superintendent, St. Louis Terminal division, who in turn is succeeded by **Paul Hill,** trainmaster, Peru, Ind. **Marion W. Hollenbeck,** trainmaster, Decatur, named assistant superintendent, Peru, and **John T. Ormond,** trainmaster, advanced to assistant superintendent, Decatur.

W. D. Dickie
CPR

C. W. Parker
CPR

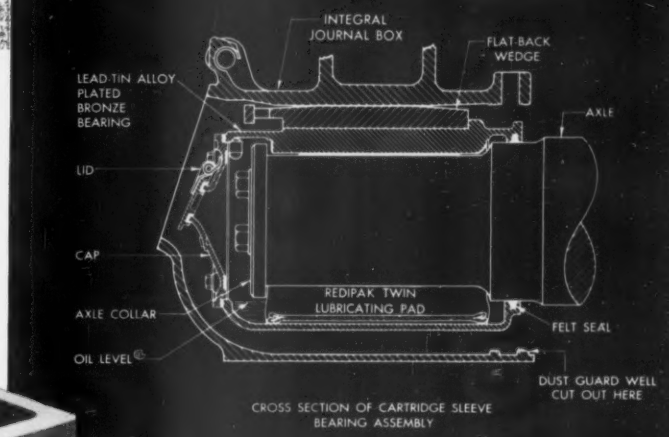
L. B. George
CPR

Howard C. Grayston
CNR

Ernest J. Carr
IC

Howard S. Powell
IC

The cartridge bearing encircles the journal. The journal collar is machined off to permit assembly, and a separate collar is secured with cap screws. The cartridge unit is cast of high strength bronze and plated with a heavy-duty lead-tin alloy. It contains its own lubricating system and is effectively sealed by a lubricated felt ring riding on the conventional dust guard diameter. The Redipak twin lubricating pad is installed when the cartridge is applied to the axle. Oil is contained in the cartridge, not in the box. The usual journal box lid is not needed.



CROSS SECTION OF CARTRIDGE SLEEVE BEARING ASSEMBLY

Here is the New National Cartridge Bearing!

Road service is now demonstrating that this economical sleeve bearing stands up under today's toughest freight car service

This revolutionary new concept in journal bearing design—now being road tested—may well become the freight car bearing of the future. The National Cartridge Bearing is a complete, sealed bearing and lubricating system. It neatly fits a standard journal box after the dust guard well has been cut out. The bearing encircles the journal—so it cannot lift or shift—and contains its own oil reservoir, Redipak® twin lubricating pad, cover and seal.

Here are a few of the principal advantages offered by the cartridge bearing unit: It stands up to greater impact and braking forces than do roller bearings. It requires very little maintenance—just an infrequent check of oil level and occasional replenishment of oil supply. It assures longer life—no measurable wear on either bearings or journals in over a year's accelerated road service. It minimizes the chances of hot boxes. And finally, it provides savings in initial costs when compared to roller bearings . . . savings in installation and replacement costs . . . and savings in removal costs when a wheel change is needed.

Present service tests on three roads have proven excellent and are validating our laboratory findings. One thousand car sets have been approved by AAR for test in interchange service.

Wheel, axle and cartridge sets are made up in advance for assembly into trucks. No bearing work is done on the rip track.

A-5242

AMERICAN **Brake Shoe** COMPANY

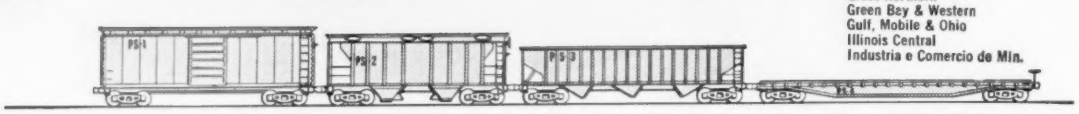
RAILROAD PRODUCTS DIVISION

530 Fifth Avenue • New York 36, N. Y.

PS-1
PS-2
PS-3
PS-4

Relied on by:

Akron, Canton & Youngstown
Alabama Power Co.
Amer. Smelt. & Ref. (Mexico)
American Sugar Refining
Ann Arbor Railroad
Atchison, Topeka & Santa Fe
Atlanta & West Point
Baltimore & Ohio
Bangor & Aroostook
Bessemer & Lake Erie
Birmingham Southern
Boston & Maine
Maine Central
Buffalo Creek R.R.
Canadian National
Canadian Pacific
Central Soya
Central of Georgia
Central R. R. of New Jersey
Chesapeake & Ohio
Chicago, Burlington & Quincy
Chicago & Eastern Illinois
Chicago & Illinois Midland
Chicago & North Western
Chicago Great Western
Chgo., Milw., St. Paul & Pac.
Chgo., Rock Island & Pacific
Chgo., St. Paul, Minn'pls & Omaha
City of Chicago
Clinchfield
Colo. Mill & Elevator Co.
Columbus & Greenville
Copper Range
Delaware & Hudson
Delaware, Lackawanna & West'n
Denver & Rio Grande Western
Detroit, Toledo & Ironton
Duluth, Messabi & Iron Range
Duluth, So. Shore & Atlantic
Elgin, Joliet & Eastern
Erie
Escanaba & Lake Superior
Ferrocarril Del Pacifico
Florida East Coast
Ft. Dodge, Des Moines & South'n
General American Trans.
Georgia Railroad
Western Railway of Alabama
Grand Trunk Western
Great Northern
Green Bay & Western
Gulf, Mobile & Ohio
Illinois Central
Industria e Comercio de Min.



PS-1 box car, **PS-2** covered hopper, **PS-3** open hopper, **PS-4** flat car

standardized freight cars

from the experience of the world's largest carbuilder

In 1946, Pullman-Standard, as the leading carbuilder, recommended that the railroad industry break with freight car building tradition and substitute standardization and mass-production for costly customization and hand work.

Pullman-Standard believed that the railroads would welcome freight cars designed for longer, more dependable life, reduced operating and maintenance costs. And dollar saving cars that were mass-produced with the precision and economies of modern long-run production techniques.

This belief proved correct. The first standardized freight car—the PS-1 Box Car—earned railroad acceptance and over 87,000 PS-1s have since been built or are on order. This means that one out of every four box cars built in the last eleven years has been a PS-1.

To fill other railroad rolling stock needs, Pullman-Standard has added the PS-2 Covered Hopper, PS-3 Open Top Hopper and the new PS-4 Flat Cars to its standardized freight car line.

The PS-4 Flat Car is an all-purpose unit designed in varying lengths to fit buyers' requirements. It can be used for general service, equipped with bulkheads for such lading as lumber or with hold-down devices for trailers-on-flat-car movement.

Contact with the nearest Pullman-Standard office will bring prompt response and full information on the complete line of P-S Standardized Freight Cars.

J. C. Corrigan Co.
Kansas City Southern
Lake Superior & Ishpeming
Lancaster & Chester
Lehigh Valley
Lehigh & New England
La Salle & Bureau County
Louisville & Nashville
Maine Central
Minn'pls, Northfield & South'n
Minneapolis & St. Louis
Mississippi Central
Missouri-Kansas-Texas
Monon
National Sugar Refining
Nashville, Charleston & St. Louis
New Haven
New York Central
N. Y., Susquehanna & Western
Nickel Plate
Norfolk & Western
North American Car Co.
Northern Pacific
Oliver Mining Co.
Pennsylvania
Phila. Qtz. of Cal.
Pittsburgh & West Virginia
Richmond, Fred'bg & Potomac
Rutland Ry. Co.
Santos a Jundiai
St. Louis-San Francisco
St. Louis Southwestern
Savannah & Atlanta
Seaboard Air Line
Southern Pacific
Southern Railway
Tennessee Central
Texas-Mexican
Toledo, Peoria & Western
Union Pacific
Union Railroad
U. S. Army
U. S. Navy
U. S. Trans. Corps
U. S. War Department
Virginian
Wabash
Western Maryland
Western Pacific

WORLD'S LARGEST MANUFACTURER OF FREIGHT AND PASSENGER CARS

PULLMAN-STANDARD

CAR MANUFACTURING COMPANY
SUBSIDIARY OF PULLMAN INCORPORATED
221 NORTH LA SALLE STREET, CHICAGO 1, ILLINOIS
BIRMINGHAM, PITTSBURGH, NEW YORK, SAN FRANCISCO, WASHINGTON

MARKET OUTLOOK *at a glance*

Carloadings Drop 0.9% From Previous Week

Loadings of revenue freight in the week ended July 27 totaled 736,407 cars, the Association of American Railroads announced on August 1. This was a decrease of 6,952 cars, or 0.9%, compared with the previous week; an increase of 86,601 cars, or 13.3%, compared with the corresponding week last year; and a decrease of 54,019 cars, or 6.8%, compared with the equivalent 1955 week.

Loadings of revenue freight for the week ended July 20 totaled 743,359 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, July 20

District	1957	1956	1955
Eastern	110,676	108,092	131,778
Allegheny	144,177	105,179	153,812
Pocahontas	67,238	61,341	64,286
Southern	116,914	124,263	118,329
Northwestern	124,086	72,969	131,363
Central Western	123,979	118,860	123,738
Southwestern	56,289	57,788	58,602
Total Western Districts	304,354	249,617	313,703
Total All Roads	743,359	648,492	781,908
Commodities:			
Grain and grain products	68,193	62,448	69,473
Livestock	5,441	6,881	5,398
Coal	136,817	134,224	130,675
Coke	10,561	4,298	12,248
Forest Products	42,202	48,540	46,978
Ore	92,614	16,948	83,090
Merchandise l.c.l.	52,027	56,178	67,364
Miscellaneous	335,504	318,975	366,682
July 20	743,359	648,492	781,908
July 13	691,991	619,988	794,138
July 6	535,334	478,297	648,992
June 29	732,349	755,279	695,841
June 22	746,764	799,592	794,427
Cumulative total, 29 weeks	19,812,194	20,675,823	20,105,132

IN CANADA.—Carloadings for the seven-day period ended July 14 totaled 87,268 cars, compared with 74,643 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
July 14, 1957	87,268	27,449
July 14, 1956	95,899	30,535
Cumulative Totals:		
July 14, 1957	2,098,486	902,289
July 14, 1956	2,279,339	954,723

New Equipment

FREIGHT TRAIN CARS

► *Central of Georgia.*—Ordered 500 70-ton, open top, triple hopper cars from American Car & Foundry for $4,150,000; delivery expected at rate of 25 cars a day beginning late this month.

PIGGYBACK

► *Wabash.*—Ordered 20 low-side and 10 high-side 35-foot trailers from Baker Trailer Company, St. Louis, for piggyback operations; also planning purchase of 25 "high-cube" 35-foot closed vans (2,200-2,250 cubic feet capacity) and 10 35-foot mechanically refrigerated trailers.

New Facilities

► *Atlantic Coast Line.*—Ordered equipment for centralized traffic control on 25 miles single track, Vitis, Fla., to Croom; Union Switch & Signal, Division of Westinghouse Air Brake, is supplier.

► *Baltimore & Ohio.*—Will construct highway bridge carrying Third street in Clarksburg, W. Va., over its tracks; reconstruction will be at B&O expense but city is to assume ownership and maintenance on completion.

► *Grand Trunk Western.*—Awarded contract to C. A. Hull Co., Birmingham, Mich., for reconstruction of Deming Road grade separation at Flint, Mich., including removal of two separate 36-ft TPG spans and replacement with two semi-TPG 72-ft spans of new concrete abutments for double track; total approximate cost $313,000; project necessitated by widening and lowering highway for increased clearances; city will perform street work and drainage.

► *Indian Railways.*—Construction of 187-mile meter-gage railroad to connect Khandwa with Hingoli in Central India has been initiated; cost estimated at $25 million; completion set for 1959. New line will link 10,113-mile system of northern India with 4,933-mile system in south.

► *Milwaukee.*—Completed $1,000,000 additions to facilities at Othello, Wash.; included are new 11-track yard with 660-car capacity, 60-car icing facility, and 2,200-ton refrigerated ice storage building with mechanical conveyors for moving ice into and out of the building.

► *Nashville, Chattanooga & St. Louis.*—Major projects (completion date in parentheses) include: Hills Park, Ga., new retarder yard and freight house facilities, jointly with L&N, $10,188,442 (August 1); Boyce, Tenn., grade separation, jointly with Southern, $91,094 (August 1); on Nashville Division near Dickson, Tenn., replacement of creo pile trestle approaches and steel span on pile piers with six precast concrete slab spans and one steel span with concrete deck on concrete capped reinforced concrete filled bents and piers, $65,431 (October 1); Johnsonville, Tenn., construction of 5,549-ft lead track to site of E. I. du Pont de Nemours & Co., $63,714 (August 1); Chattanooga Division, Antioch, Tenn., construction of concrete slab bridge over new highway, $62,000 (December 1.)

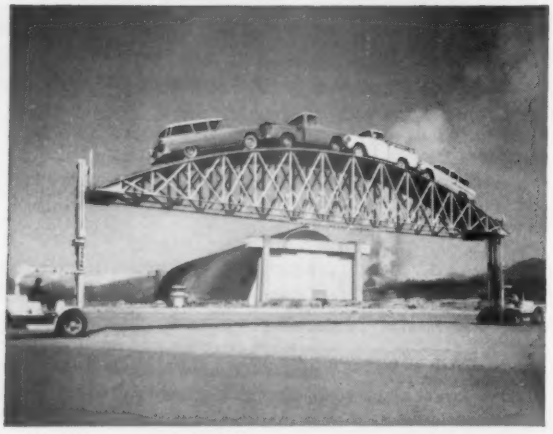
► *New York Central.*—Ordered equipment from General Railway Signal Company for 96 miles of centralized traffic control on single track between

(Continued on page 47)

a RAILWAY AGE time-saver page

LARGE

Shop officials at the 100-acre Missouri-Pacific construction and repair facility at Desoto, Mo., estimate fir plywood car lining saves up to ten man hours per car. New cars are built on an assembly line basis; ¾" plywood is used for sides, 1" for ends. Workers say the panels go on faster, saving construction time. On a 40-foot car, labor costs come to only $13. Plywood lining helps insure tight, rigid construction. Walls are smooth, easy to clean, yet rugged and highly resistant to shock and impact.



STRONG

This 60′ fir plywood truss supports four vehicles to dramatize its remarkable strength and stiffness. A continuous panel of scarf-jointed fir plywood acts as both top chord of truss and roof deck. It's done by stressing the plywood in a curve to provide tremendous additional strength. The idea also points the way to new construction economies in large one or two story buildings. On the Diamond Lumber Co.'s big Johnson Creek warehouse in Portland, plywood trusses helped hold construction costs to $2.00 a foot.

VERSATILE

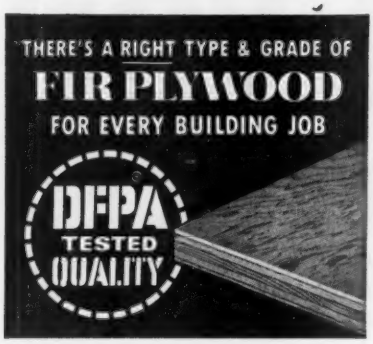
Southern Pacific's huge central mill in West Oakland uses three to four carloads of fir plywood every month for just about every conceivable building job. W. R. Jones, superintendent of the 135 man shop, says that fir plywood is one of the mill's most versatile and indispensable building materials. Huge stacks in the picture give only a hint of the volume regularly used. Plywood applications range from complete buildings to deck boards used to cushion and separate valuable ladings. Others include cases, containers, re-usable concrete forms, signs, fixtures and displays.

DFPA TESTED QUALITY

FIR PLYWOOD

means quality construction

FOR MORE INFORMATION about uses shown above, design and/or specification data, mail coupon ⟶



1. SPECIFY BY DFPA QUALITY TRADEMARKS

DFPA grade-trademarks appear only on plywood manufactured, inspected and scientifically tested under the DFPA quality control program. DFPA, Douglas Fir Plywood Association, is a non-profit industry organization devoted to product research, promotion and quality maintenance.

2. CHOOSE THE RIGHT GRADE FOR EACH JOB

Fir plywood comes in two types: 1. *Exterior* (waterproof glue for permanent exposure to water or weather); 2. *Interior* (moisture-resistant glue) for indoor uses, crating, sheathing, maintenance. Within each type are several grades – i.e., panels with one good side, two good sides. Most popular grades are shown below.

EXT-DFPA
Exterior plywood for permanent outdoor uses

PlyPanel® for paneling, most indoor uses

PlyScord® is unsanded panel for sheathing, crating, bins, etc.

PlyForm® concrete form grades come in Exterior and Interior types.

SPECIALTY PANELS include 1. *Overlaid Exterior plywood* (hard, smooth, abrasion-resistant fused resin-fiber surfaces) for siding, signs, tanks, concrete forms; 2. *Textured panels* with smart grooved, brushed or striated surfaces for fixtures, siding, special decorative effects.

DOUGLAS FIR PLYWOOD ASSOCIATION
Tacoma 2, Wash. (Good U.S.A. Only) Dept. 192
☐ Please send basic fir plywood specification data.
☐ Also send information about use of fir plywood for.....
Name
Firm
Address
City Zone State

MARKET OUTLOOK (continued)

Jackson, Mich., and Elkhart, Ind.; electric lock locations will include electronic overlay track circuits which eliminate need for insulated joints and reduce track connections by half.

► *Northern Alberta.*—Will spend almost $5 million in capital projects this year; included are new diesel shop at Dunvegan yard; $881,400 in bridge renewal and replacement work; $1,555,930 of roadbed improvements including welding 20 miles of track, installation of heavier rail on 60 miles of track; new trackage at Dunvegan yard, Enilda, Philomena, Peace River, Grimshaw and Grande Prairie, purchase of new roadway and signal equipment; and $667,260 in tie replacement.

► *Northern Pacific.*—Started operations July 25 of a newly completed diesel locomotive servicing shop at Livingston, Mont. It is part of $790,000 expansion of diesel maintenance facilities there including new fueling, sanding and washing equipment.

► *Ontario Northland.*—Projects to be undertaken in 1957 include new diesel shop at Rouyn, Que. (estimated cost $115,000), and 25 additional track miles of absolute permissive block signaling (estimated cost $150,000); material for APB signaling will be purchased from General Railway Signal Company.

► *Peoria & Pekin Union.*—Expects to start construction this fall on new mechanical terminal near its recently completed office building at Creve Coeur, Ill. (Railway Age, Aug. 22, 1955); facilities will include 122-ft by 114-ft diesel shop with two stub tracks and one through track; 94-ft by 51-ft storeroom housing offices of purchasing agent and storekeeper; 41-ft by 57-ft bridge and building shop; 39-ft by 41-ft locker and washroom; separate locker, washroom and waiting room building for enginemen and switchmen, with offices for trainmaster and crew dispatchers; estimated cost, including trackage and automatic sanding facilities, will approximate $602,160.

► *Rock Island.*—Projects underway include: Purchase and remodeling of 100-ft by 200-ft one-story masonry type building in St. Paul, Minn., for use as rail-motor freight terminal; extension of ice dock to increase capacity from 44 to 71 cars and relocation of head house at Armourdale, Kan.; construction of 10.79 miles of new branch line main track between Winterset, Iowa, and Earlham, Iowa, and retirement of 25.24 miles of branch line main between Summerset Junction and Winterset; construction of new yard and freight house at Dallas, Tex., with company forces handling yard work and Homer A. Parks Construction Co. acting as contractor for freight house, which was completed June 30.

► *St. Paul Union Depot.*—Contracted with Westinghouse Electric Corporation for installation of six electric stairways to facilitate movement of passengers between concourse and track platform levels; installation of first stairway began July 1; completion of entire project scheduled for October 1958; total cost of work estimated at $250,000.

Maintenance Expenditures

► *Small Increase in May.*—Expenditures by Class I roads for maintenance of equipment, way and structures in May were up $3.1 million, compared with same month last year, according to report of ICC Bureau of Transport Economics and Statistics summarized below:

	May 1957	*May 1956*	*% Increase*
Maintenance of Way & Structures	$132,862,918	$130,556,867	1.8
Maintenance of Equipment	165,832,348	164,954,457	.5
Totals	298,695,266	295,511,324	1.1

New bridges

(*Continued from page 33*)

Next in size is the Millmont bridge. This structure has five girder spans, two 97-ft 3 in. long and three 101 ft 10 in. in length, and a 48-ft concrete and I-beam approach span, giving a total length of 548 ft.

In the Tulpehocken bridge there are four girder spans ranging in length from 99 ft to 115 ft 5 in. and having total length of 422 ft 10 in.

All the new bridges across streams were built on an offset alinement so that they could be constructed in the clear and the steel could be erected from the old bridges. The old structures have since been removed.

Work at Penn Avenue Viaduct

Strengthening the 845-ft Penn avenue viaduct involved several different types of work. The existing through-girder span across Penn avenue, which had sidewalk columns, was replaced with a new through girder having a clear span of 86 ft 6 in. between abutments. Between Penn avenue and Cherry street, 150 ft, the old viaduct was replaced with a fill between concrete retaining walls.

Between Cherry street and Franklin street, 170 ft, the viaduct was replaced with concrete-encased I-beam spans supported on concrete piers. The through-girder structure across Cherry street was replaced in the same way with one of these spans.

A 325-ft length of the viaduct between Franklin and Chestnut streets was strengthened by welding new material to the existing structure. Eventually this section is to be replaced with concrete-encased I-beam construction. The existing spans across Franklin and Chestnut streets have been replaced with new deck-girder spans, each 64 ft long. These spans, as well as the one across Penn avenue, have solid concrete decks.

Working Under Traffic

Since it was necessary to retain the Penn Avenue viaduct on the existing alinement all work on this structure has been done under traffic.

Strengthening the bridges on the Reading Belt cost approximately $3¼ million. It was undertaken under the general supervision of E. L. Gosnell, then chief engineer and now retired, and was finished under the present chief engineer, F. W. Biltz. R. F. Wood, then engineer bridges, had direct charge of the work in the beginning. Following his retirement last year this responsibility was assumed by his successor, Mr. Good.

NEAR YOU

there's a GRAYBAR man

who can save you time in obtaining railroad lamps and lighting equipment, pole line supplies, communication equipment, electrical repair-shop supplies, . . . everything electrical!

At strategic points throughout the nation, many first-quality electrical items are conveniently available via Graybar. In the following list of Graybar warehouse locations, you'll find the name, address, and phone number of a Graybar Representative near you – a specialist who can help you obtain the electrical items you want with minimum delay. He'll gladly answer any questions about technical aspects, deliveries, prices, or Graybar service. *Graybar Electric Company, Inc. Executive offices: Graybar Building, 420 Lexington Ave., New York 17, N. Y.*

758-208

ALABAMA
*Birmingham 4 — 709 First Ave., N.
Birmingham 4-1861 • L. A. Womeldorf
*Mobile — 701 N. Joachim Street
Mobile 2-3511 • R. L. Wear

ARIZONA
Phoenix — 1700 N. 22nd Avenue
Alpine 2-2371 • R. S. Carlson

ARKANSAS
Little Rock — 417 Boyd Street
Little Rock 5-1246 • S. L. Oglesby

CALIFORNIA
Fresno 2 — 101 Van Ness Avenue
Long Beach 13 — 800 West 16th Street
Fresno 2-4175 • C. H. Wissing
Long Beach 70-2911 • C. A. Overlease
*Los Angeles 54 — 210 Anderson Street
Angelus 3-7282 • C. V. Kelly
Oakland 7 — 1911 Union Street
Glencourt 1-5451 • M. L. Wilkins
*Sacramento 1 — 1900 14th Street
Gilbert 2-8976 • J. M. Dundon
*San Bernardino — 655 South "H" Street
San Bernardino 9-1051 • J. H. Gregerson
San Diego 1 — 720 State Street
Belmont 3-1361 • R. T. Redfield
*San Francisco 1 — 1750 Alameda Street
Market 1-5131 • O. W. Balser
Santa Ana — 301 French Street

COLORADO
*Denver 4 — 104 Wazee Market
Tabor 7116 • H. E. Woodring

CONNECTICUT
West Hartford 6 — 453 New Park Avenue
Hartford 33-2631 • D. E. Sullivan
*New Haven 7 — 25 Union Street
New Haven 8-4163 • N. E. Olsen

DELAWARE
Wilmington 1 — 915 South Heald Street
Olympia 6-7761 • L. E. McIntyre

DISTRICT OF COLUMBIA
*Washington 2 — 60 Florida Ave., N. E.
Adams 4800 • Walter Christmas

FLORIDA
Fort Lauderdale — 845 Northwest 6th Avenue
*Jacksonville 6 — 1563 Jessie Street
Elgin 6-7611 • D. E. Dodamead
R. L. Griffin
Miami 42 — 2111 North West 22nd Avenue
Newton 5-1411 • J. E. Powell
Orlando — 400 Pittman Street
Orlando 6133 • N. W. Upson
St. Petersburg 3 — 1900 First Ave. South.
7-4161-2 • R. L. Munro
Tampa 6 — 801 North Rome Avenue
Tampa 8-8881 • A. P. Torres

GEORGIA
*Atlanta 1 — 333 North Ave., N. W.
Cypress 1751 • W. C. Brown
*Savannah 1 — 2601 Whitaker Street
Savannah 2-1121 • L. L. Black

IDAHO
Boise — 14th & Idaho Sts.
Boise 6315 • L. Maynard Smith

ILLINOIS
*Chicago 7 — 850 W. Jackson Blvd.
Canal 6-4100 • F. D. Wilson
*Peoria 2 — 704 South Adams Street
Peoria 4-8211 • W. W. Smilde
*Springfield — 405 North McArthur Blvd.
Springfield 8-4084 • H. Bryson

INDIANA
Evansville 7 — 2110 North Fares Avenue
Harrison 4-7581 • J. T. Young
Hammond — 6445 Indianapolis Blvd.
Sheffield 5830 • D. E. Clisbee
*Indianapolis 2 — 1300 W. 16th St.
Atlantic 2351 • R. W. Nelson

IOWA
Davenport — 206-210 East 5th St.
Davenport 3-2769 • J. M. Ferguson
Des Moines 9 — 24 Eleventh Street
Des Moines 3-8614 • L. C. Esthus
Sioux City — 510 Pearl St.
Sioux City 5-0189 • D. J. Karr

KANSAS
Wichita 1 — 424 No. Rock Island Ave.
Wichita 7-1366 • J. L. Bevers

KENTUCKY
Lexington — 745 East 3rd Street
Lexington 5-2020 • L. R. Nester
*Louisville 13 — 360 Farmington Avenue
Melrose 7-5411 • M. Resch

LOUISIANA
Baton Rouge — 2442 Ted Dunham Ave.
Baton Rouge 4-7093 • C. D. Johns
Lake Charles — 206 W. 11th Street
Hemlock 3-4229 • V. P. Flynn
*New Orleans 13 — 1116 Magnolia St.
Canal 6263 • E. I. Funk
Shreveport — 2536 Linwood Avenue
Shreveport 5-3271 • A. W. Wheeler

MAINE
*Portland 3 — Center & Commercial Sts.
Portland 3-1761 • S. C. Brown

MARYLAND
*Baltimore 5 — 3701 East Monument Street
Dickens 2-5500 • J. D. Rhoads

MASSACHUSETTS
*Boston 16 — 287 Columbus Avenue
Kenmore 6-4567 • K. B. Mayer
Springfield 4 — 32 Patton St.
Springfield 7-4373 • H. O. Edoff
Worcester 5 — 108 Grove Street
Worcester 6-4311 • H. G. Rappel

MICHIGAN
*Detroit 1 — 15045 Hamilton Ave.
Townsend 8-5550 • C. R. Carlson
*Flint 6 — 2424 Kansas Ave.
Flint 2-4101 • W. A. Arthur
*Grand Rapids 2 — 432 Monroe Ave., N. W.
Glendale 1-2561 • S. A. Faren
Lansing 10 — 421 E. Elm Street
Lansing 4-5434 • H. G. Mitchell

MINNESOTA
*Duluth 6 — 1730 West Michigan Street
Randolph 2-6685 • D. A. Hilger
*Minneapolis 15 — 824 South Fourth St.
Geneva 1621 • D. J. Keefe
*St. Paul 4W — 717 North Prior Ave.
Nestor 2631 • F. A. Sjogren

MISSISSIPPI
Jackson — 154 E. Porter St.
Jackson 3-6316 • L. A. Peterson

MISSOURI
*Kansas City 8 — 1644 Baltimore Ave.
Baltimore 1644 • E. H. Williamson
E. L. Schott
*St. Louis 10 — 600 S. Taylor Ave.
Jefferson 1-4700 • J. R. Hayes
R. M. Peck
Springfield — 524 St. Louis St.
Springfield 2-0587 • G. A. Griffin

MONTANA
Butte — 604 E. Aluminum St.
Butte 3234 • S. L. Dye

NEBRASKA
*Omaha 5 — 3626 Martha St.
Webster 7676 • W. E. Gilbert

NEW HAMPSHIRE
Manchester — 103 Hampshire Lane
Manchester 4-4341 • P. A. Dorn

NEW JERSEY
Clifton — 1454 Main Ave.
Sherwood 2-7868 • George Johnson
Newark 5 — 50 McWhorter Street
Market 2-5100 • J. P. McCarthy
New Brunswick — 2762 Livingston Ave.
Charter 7-9375 • J. J. McEllen

NEW YORK
*Albany 4 — 40 Van Woert Street
Albany 5-1564 • L. F. X. Bass
Binghamton — 518 Security Mutual Bldg.
Binghamton 2-5926 • M. E. Ransom
Buffalo 4 — 180 Perry Street
Washington 3700 • J. T. Baker
*New York City — 21-15 Bridge Plaza North
Long Island City 1
Exeter 2-2000 • W. C. Lieneck
Rochester 6 — 175 Dewey St.
Baker 7700 • H. G. Linder
Roosevelt Field, L. I. — 1 South Street
Pioneer 1-3900 • L. S. Colyer
Syracuse 1 — 327 North West Street
Syracuse 2-1281 • W. J. McNulty

NORTH CAROLINA
Asheville — 221 Patton Avenue
Asheville 3-4761 • H. S. Corey, Jr.
*Charlotte 1 — 120 W. Morehead St.
Charlotte 6-4886 • A. A. Wilson
Durham — 303 South Duke Street
Durham F-113 • M. C. Shorey
Rocky Mount 3 — 761 Planters Street
Rocky Mount 2-5171 • L. A. Shaw
Winston-Salem 1 — 955-59 Brookstown Ave.
Winston-Salem 4-2461 • J. W. Van Dorsten

OHIO
Akron 10 — 975 East Tallmadge Avenue
Jefferson 5-4143 • D. J. Mertzlufft
*Cincinnati 14 — 115-129 W. McMicken Ave.
Main 0600 • L. J. Morrissey
*Cleveland 3 — 1100 E. 55th St.
Henderson 2-2500 • A. C. Schwager
Columbus 15 — Third & Chestnut Sts.
Fletcher 4811
Dayton 2 — 332-42 West Monument Ave.
Michigan 5665 • A. J. Fischer
Portsmouth — 923 Washington Street
Portsmouth 2-3631 • J. R. Harlan
Toledo 8 — 1333 East Manhattan Blvd.
Express 1641 • E. N. Cundiff
Youngstown 1 — 602 West Rayen Ave.
Youngstown 4-0124 • R. F. Grossett

OKLAHOMA
Oklahoma City — 12 E. California St.
Oklahoma City 3-9351 • D. L. Pulliam
Tulsa 4 — 2406 E. 12th St.
Tulsa 6-1151 • F. L. Cummings

OREGON
Eugene — 2180 6th Ave. West
Eugene 4-2224 • J. H. Bailor
*Portland 9 — Park & Flanders Sts.
Broadway 6641 • Paul Barber

PENNSYLVANIA
Allentown — 1941 Hamilton Street
Allentown 4-9341
Bethlehem 1-0657 • A. Stang, Jr.
Erie — 204 W. 6th Street
Erie 2-2221
Greensburg — 15 Willow Street
Greensburg 7560 • J. P. Fitzurka
Harrisburg — 1039 S. Thirteenth St.
Harrisburg 5-7303 • W. H. Naudascher
*Philadelphia 7 — 910 Cherry St.
Walnut 2-5405 • T. E. Laughlin
F. P. Hudson
*Pittsburgh 12 — 900 Ridge Ave.
Allegheny 1-4100 • J. E. Emery
R. N. McCoy
Reading — 333 Buttonwood St.
Reading 6-1581 • J. W. Riddell

RHODE ISLAND
Providence 3 — 194-196 Richmond St.
Dexter 1-8100 • R. B. Buffinton

SOUTH CAROLINA
Columbia — 710 Lady St.
Columbia 2-2125 • J. H. Littleton, Jr.
Greenville — 302 West Washington Street
Greenville 9-1338 • T. M. Floyd, Jr.

SOUTH DAKOTA
Sioux Falls — 300 N. Phillips Ave.
Sioux Falls 4-5621 • R. K. Jenson

TENNESSEE
*Bristol — 536 Anderson Street
South 4415 • H. E. Smitter
J. R. Crang
*Chattanooga 4 — 210 N. Highland Park Ave.
Chattanooga 6-5624 • J. R. Feeney
Knoxville 30 — Henley St. & Union Ave.
Knoxville 3-6171 • W. B. Owens
Memphis 4 — 1474 Lamar Ave.
Memphis 7-7150 • W. J. Berry
*Nashville 3 — 125 16th Ave. No.
Nashville 6-7161 • H. B. Hall

TEXAS
Abilene — 1601 South Treadway
Abilene 2-2861 • M. A. Elliston
*Amarillo — 601 E. 2nd Ave.
Amarillo 2-6778 • S. S. Rutledge
Arlington — 104 North Collins
Arlington 5-3386 • S. A. Todd
Austin — 214 E. 3rd Street
Austin 8-5674 • H. J. Frantz
Beaumont — 2155 Highway 90
Beaumont 2-8484 • L. A. Haley
Corpus Christi — 1311 Agnes Street
Corpus Christi 4-6374 • A. N. Saxon
*Dallas 1 — 717 Latimer St.
Randolph 6454 • V. M. Beesley
El Paso — 3513 Rosa St.
El Paso 3-7561 • C. Newbill
*Fort Worth 7 — 1107 Foch St.
Edison 4523 • C. C. Ross
*Houston 3 — 1702 Cullen Blvd.
Atwood 8-4571 • L. W. Floyd
Lubbock — 905 Avenue F
Porter 3-9656
San Antonio 8 — 1401 N. Hackberry St.
Fannin 6274 • R. N. Ness

UTAH
*Salt Lake City 13 — 336 N. 3rd West St.
Salt Lake City 9-8871 • R. K. Bertok

VIRGINIA
*Norfolk 8 — 1081 West 35th Street
Madison 5-7441 • John Horne
T. A. Young
*Richmond 19 — 10 S. 6th St.
Richmond 7-3491 • E. C. Toms
*Roanoke 5 — 601 Salem Ave.
Roanoke 3-3615 • W. C. John

WASHINGTON
*Seattle 4 — King & Occidental Sts.
Mutual 0123 • E. C. McEachron
Spokane 1 — 1033 West Gardner Avenue
Fairfax 7-6611 • W. A. Sparks
*Tacoma 1 — 2112 A Street
Main 0166 • R. J. Franzen

WEST VIRGINIA
Charleston — 600 Chamber of Commerce Bldg.
Charleston 6-0411 • J. S. Wilkin

WISCONSIN
Green Bay — 1140 North Irwin Avenue
Howard 5600 • J. W. Peterson
Madison 5 — 103 North Park Street
Madison 5-0005 • B. R. Lind
Milwaukee 2 — 180 N. Jefferson St.
Marquette 8-1946 • Sam Cook

*At these locations, there are Graybar Representatives who have special experience in handling railroad electrical requirements.

100,000 electrical items are distributed THROUGHOUT THE NATION . . .

OFFICES AND WAREHOUSES IN OVER 130 PRINCIPAL CITIES

LETTERS FROM READERS

BOUQUETS

DENVER, COLO.

TO THE EDITOR:

The article "How to Generate Traffic" which comprises the Action Page of the July 15 Railway Age is about the best I have read yet. In my opinion it certainly suggests very strongly that heavy volume has economic superiority over dwindling tonnage moving on high rates. Obviously these suggestions are directed to the railroads for attention, and I am sure it would be gratifying indeed to you if they received careful study and the consideration such suggestions deserve. . . .

Incidentally your new Railway Age has certainly taken on an appealing look with the July issue.

F. J. REBHAN
General Traffic Manager
American Crystal Sugar Company

•

JERSEY CITY, N.J.

TO THE EDITOR:

The current issue of Railway Age with its changed format stimulates interest immediately and the arrangement all through the magazine adds to the reader's pleasure.

It is my impression that Railway Age was one of the first of the periodicals to eliminate the practice of carrying the story on the inside third of the page. The present practice of alternating articles and advertisments makes for readability and certainly appeals to me.

P. M. KELLY
Comptroller
Central of New Jersey

•

CHICAGO

TO THE EDITOR:

After looking over your July 15 issue, I am convinced you and your staff are doing a remarkable job with what is a different magazine. . . .

The new format, method of interspersing advertising media, and the presentation of articles has a good deal of reader impact. Please accept my congratulations on a fine job.

R. H. WENDELL
Assistant Manager of Personnel
Belt Railway of Chicago—
Chicago & Western Indiana

•

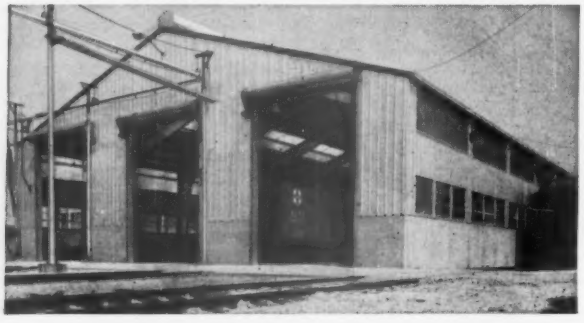
MINNEAPOLIS

TO THE EDITOR:

I very much enjoyed the coverage of Keithsburg in the July 8 issue of your magazine. I think it was thoroughly done and very well presented.

A. W. SCHROEDER
President
Minneapolis & St. Louis

One-quarter mile of proper environment



. . . for high-speed railway car repair

This 1,360 foot long Butler building just erected for the Santa Fe at their Chicago Corwith yards for the repair of rolling stock provides virtually the equivalent of custom-designed space in a standard, pre-engineered metal building. Without going into details, one look tells you here is efficient use of space, a superb use of natural daylight for top and side illumination, and an efficient self-ventilating gable design that channels hot, stale air and smoke, naturally, into the ridge ventilators.

Now you may not need a super building such as this, but the advantages of quality, usefulness and economy apply whether you use a Butler building for a simple shed or an elaborate terminal-warehouse. For reasons why Butler is your best buy in railroad buildings, call your Butler Builder. He's listed under "Buildings" or "Steel Buildings" in the Yellow Pages. Or write for brochure.

BUTLER STEEL PRODUCTS

BUTLER MANUFACTURING COMPANY

7371 East 13th Street, Kansas City 26, Missouri

Manufacturers of Buildings • Oil Equipment • Farm Equipment
Dry Cleaners Equipment • Outdoor Advertising Equipment • Custom Fabrication

Sales offices in Los Angeles and Richmond, Calif. • Houston, Tex. • Birmingham, Ala. Atlanta, Ga. • Kansas City, Mo. • Minneapolis, Minn. • Chicago, Ill. • Detroit, Mich. Cleveland, Ohio • New York City and Syracuse, N. Y. • Washington, D. C. Burlington, Ontario, Canada

CLASSIFIED ADVERTISEMENTS

Rates: $10 per column inch (1" deep x 1⅝" wide)
Equipment used or resale acceptable in this section

FOR SALE

RECONDITIONED
RAILROAD CARS FOR INTERPLANT USE
GONDOLAS • BOX • FLAT

ERMAN-HOWELL DIVISION
332 South Michigan Avenue
Chicago 4, Illinois
WEbster 9-0500

FOR SALE

Four 2-Axle Locomotive Trucks complete with Clasp Brake Rigging, Air Brake Cylinders, Wheels, Axles, Gears and Journal Boxes. Trucks used on Special Experimental Locomotive and have been in operation less than 100,000 miles. Wheels never turned. Truck specifications are:

Wheel Base ..... 9' 0"
Wheel Diameter ..... 42"
Journal Bearings—SKF 7" x 13"
Axle Bearings ..... 8-1/4"
Axle per AAR Spec M-101.45
Wheels from AAR ST-C-42 blanks
Approx. Wt. of Truck 30,000 lbs.

Priced at less than today's cost of just the Journal Boxes, Wheels and Axles.

For further information write P.O. Box 832, RAILWAY AGE, 30 Church St., New York 7, N.Y.

FOR SALE

14-Baldwin-Westinghouse 140-ton, 600 HP electric-diesel locomotives, switching or shortline, std. ga., built World War II, modernized 1949, usable either as diesel or trolley type. A-1 condition. South-west. $29,500 each.

H. Y. SMITH COMPANY
828 No. Broadway
Milwaukee, Wisconsin

FOR SALE

1500 KW RECTIFIER

WESTINGHOUSE — Mercury Arc. Ignitron 3/60/44,000 AC-15,000V. DC, Automatic Controls.

2—750KW, GE Rotary Converters-HCC-6-600V. DC.

S. M. DAVIS
510 LaSalle St. Louis 4, Missouri

HELP WANTED

WANTED immediately

Railway Accessory Equipment Engineer

Chicago location—for major project involving design and layout of electro-mechanical and material handling equipment. Excellent opportunity for permanent association with large company offering all benefits. Replies treated in strictest confidence. Box 834, RAILWAY AGE, 79 West Monroe Street, Chicago 3, Illinois.

HELP WANTED MALE

Railroad cost accountant

Experienced in railroad statistics and costs, also testimony writing. Excellent salary and working conditions. Under 40.

Group hospitalization and insurance. Willing to locate in East with a large Eastern Railroad. State age, education, and experience in first reply. All replies confidential. Address Box 833, RAILWAY AGE, 30 Church St., New York 7, N.Y.

Position Available

RAILROAD ENGINEER

Qualifications: A license to practice professional engineering and at least two years of engineering experience with a railroad.

Salary: $7500 to $9090 in annual increases.

Send resume to Personnel Office, New York State Public Service Commission, 55 Elk Street, Albany, N.Y.

ADVERTISERS

Allied Railway Supply Association 8
American Brake Shoe Company 43
American Steel Foundries 34-35

Bethlehem Steel Company 3
Butler Manufacturing Company 50

Classified Advertisements 50

Davis, S. M. 50
Douglas Fir Plywood Association 46, 47

Edgewater Beach Hotel 51
Electro-Motive Division, General Motors Front Cover
Erman-Howell Division 50
Exide Industrial Division, Electric Storage Battery Company 36-37

Fairmont Railway Motors, Inc. 17

General Steel Castings 11
Graybar Electric Company 48, 49

Hertz Rent A Car System 6

Industrial Brownhoist Corporation 19

National Malleable & Steel Castings Company 28-29
New York State Public Service Commission 50

Pullman-Standard Car Manufacturing Company 44

Shell Oil Company 24
Smith Company, H. Y. 50
Standard Railway Equipment Manufacturing Company 12
Symington-Gould Corporation, The Inside Back Cover

Teletype Corporation 38
Thermo-King Corporation 30
Timken Roller Bearing Company Back Cover

United States Steel Corporation 27
Union Switch & Signal Division of Westinghouse Air Brake Company 4

Westinghouse Air Brake Company Inside Front Cover

Youngstown Sheet & Tube Company ... 18

Supply Trade

John P. Kelly, Detroit regional manager of the industrial division of **Gould-National Batteries, Inc.,** has been named general sales manager of the division, at Trenton, N. J.

Herbert H. Rogge, executive vice-president, has succeeded **Samuel M. Felton** as president of **American Car & Foundry Division** of **ACF Industries, Inc.** Mr. Felton will remain with the company as an advisor. Before coming to ACF in 1956, Mr. Rogge was president of **Canadian Westinghouse Company,** a post he assumed in 1950 following 28 years with **Westinghouse Electric Corporation.**

Canadian Car Company Limited and **Standard Railway Equipment Manufacturing Company** have announced that Can-Car has acquired all the railway equipment business formerly carried on by Standard's Canadian company at Lachine, Que. Manufacture of these products will continue to be carried on at the Lachine plant until the modernized facilities which Can-Car is building at its Dominion plant are completed in about a year.

Robert K. Morgan has joined **Reilly Tar & Chemical Corporation** as sales representative in eastern territory, at Tuckahoe, N. Y.

Sterling C. Spielman, director of electronic engineering for **Philco Corporation's** government and industrial division, has been appointed director of engineering of that division.

G. R. Reed has been appointed chief engineer of the railway division of **Dana Corporation,** at Toledo, Ohio.

Brandon Equipment Company has completed arrangements with **R. E. Russell & Co.** of Hughesville, Pa., under which Brandon will take over the sale of equipment developed by the Russell company for railroad flat cars used in piggyback service. **Col. R. E. Russell,** who has headed the Russell firm, will have charge of Brandon sales activities in the eastern region for the combined line of products.

John P. Kelly

Herbert H. Rogge

Coach & Car Equipment Corp. has been appointed national sales agent for **James Lees & Sons** carpet for railroad rolling stock.

Acme Steel Company broke ground in Riverdale, Ill., July 22 for a new process steelmaking plant to cost an estimated $23 million. Completion of the plant is scheduled for late in 1958.

Reliance Electric & Engineering Co. and **Master Electric Company** have announced that combination of the two companies has received shareholder approval and that consolidation will be effected by exchange of shares of Reliance for the assets of Master. The latter will be operated as a division of Reliance under supervision of the present management.

Pittsburgh Screw & Bolt Corp. has announced that negotiations have been completed for merger with **Southington Hardware Manufacturing Company,** subject to approval by shareholders of Southington. The latter manufactures screws and fasteners in small diameters and through the acquisition Pittsburgh will be able to produce a complete line of industrial fasteners.

Barrett Division, Allied Chemical & Dye Corporation, has consolidated two separate sales organizations—formerly designated as creosote and pitch sales and protective coating sales—into a new industrial tar products sales department, under the direction of **V. C. Otley,** manager, with office in New York.

The hotel with
MORE

With every passing year, the most important individuals and groups in the insurance business find the Edgewater Beach has more — so much more — to offer and to enjoy.

You can mix business and pleasure in the Country Club atmosphere of the Edgewater Beach. Putting greens, tennis courts, luxurious Cabana Club and pool, and areas of shaded walks and gardens.

And you'll find dining to suit every taste. The Polynesian Village, Charterhouse, Yacht Club and Rib Room.

Yes, the Edgewater Beach offers you more for your own enjoyment, for parties, meetings or conventions for groups 10 to 1000.

Neal Lang
General Manager

Louis Rogers
Sales Manager

THE Edgewater Beach HOTEL

NEW YORK Hotel Roosevelt
WASHINGTON The Mayflower
CLEVELAND Hotel Cleveland
CHICAGO Edgewater Beach Hotel
BOSTON Somerset Hotel

Make Uncle Sam a Partner?

Car shortage is a problem of the railroad industry—because if any considerable number of railroads are not supplying "their share" of cars, the service of the entire industry suffers.

But ending the car shortage is the responsibility of individual railroads. The industry as a whole does not buy cars. Since individual railroads have to find the money for equipment, is it the business of the industry as a whole to pass judgment on the means individual roads see fit to adopt to raise the money?

That seems to be the question in the minds of a lot of railroad managements which do not favor, for their own use, the proposal that the federal government make available its credit for the financing of equipment purchases. Details of this project were made public for the first time on July 24 by President J. M. Symes of the Pennsylvania before the House Interstate Commerce Committee, and were reported in our last week's issue. The proposal is supported by most of the Eastern railroads, with those in other territories remaining "neutral"—neither for nor against.

•

The equipment shortage problem is not a new one. It is chronic. It has arisen because the railroads, on the average, are not being permitted to earn enough money to attract the large additional investment they need. Some railroads have earnings which *are* attractive to investors—and these railroads can borrow all the equipment money they want, and at interest rates no higher than other sound companies are paying. But the industry's equipment shortage will not be ended so long as only those companies with ample credit are willing and able to supply "their share."

Relying on government credit, obviously, is an expedient—not a program for the correction of the basic errors and injustices of public policy which are keeping the railroads impoverished. The public utilities are more wisely and more generously dealt with by government than the railroads are. Hence they have little or no difficulty in raising the new capital they need to expand their plant to take care of rapidly growing demand. In contrast, the railroads are having the devil's own time in getting, even, the investment funds they need just to keep present capacity from wasting away.

There's no disgrace in resorting to an expedient, if a permanent and comprehensive remedy is not immediately available. A man may in good conscience take an aspirin tablet for relief of a headache—in full knowledge that the pain will be recurrent until he buys new spectacles.

The Eastern roads' project would be "government aid," but not a subsidy. It would be nothing like the direct monetary gifts the federal government contributes to some of the country's richest corporations—e.g., in their toll-free use of improved inland waterways. There is, of course, no denying that getting mixed up with government in any kind of deal like this is risky. There is also no denying that the railroads are involved with government up to the hilt already—with no attendant advantages whatsoever. There are those who believe the risk would be minimized if a time limit were set on the plan.

Proponents have, wisely, put the plan forward only in tentative form—for discussion. And the more constructive discussion it gets the better.

DECISION UNAVOIDABLE: Both proponents and opponents (for themselves) of this project are competent and responsible railroad officers—activated by their sense of duty to the industry and to their individual companies. It is the task of the proponents to dissolve not unreasonable fears that their project might add to the creeping socialism from which this country is suffering. It is equally the duty of those who do not like the project to come up with some alternative program for relieving the railroads' chronic equipment shortage. The industry just must find an answer. No action at all will be one answer—but not the right one.

FOR DEPENDABLE OPERATION
WITH INCREASED SERVICE LIFE...

A. A. R. Alternate Standard Vertical Plane Swivel Yoke Y-30
Striking Casting and Center Filler— 3-Piece Design Welded and Stress-Relieved
A. A. R. Type H Tightlock Coupler H-80
A. A. R. Standard E Coupler with Alternate Standard Swivel Shank E-61A-HT
Rubber Type Resilient Side Bearing
Yoke Y-50 Standard Pocket for Conventional Draft Gear Application
Truck Pedestal
Composite Articulated Journal Box Lid
Truck Spring Snubber
Radial Connection Y-25-A
Long Travel Snubber for Locomotives and Passenger Cars
A. A. R. Type F Interlocking Coupler F-70
Chrysler Design Truck
Yoke Y-65 Standard Pocket for Twin Cushion Draft Gear Application
Journal Box Hinge Lug Wear Plate and Self-Adjusting Bushing

specify

Symington®

RAILWAY EQUIPMENT PRODUCTS

THE Symington-Gould Corporation

WORKS: DEPEW, NEW YORK

New York • Chicago • St. Louis • Boston • San Francisco • In Canada: ADANAC SUPPLIES, LTD., Montreal, Quebec

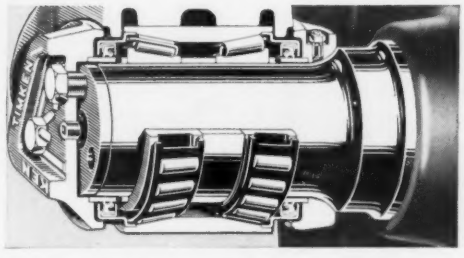
Number of "Roller Freight" cars up 43% in 15 months

6,671* "Roller Freight" cars—cars on Timken® roller bearings—have been placed in service or on order since February 1, 1956—an increase of 43%.

The total number of "Roller Freight" cars has soared to over 23,000*.

Nearly one-third of "Roller Freight" cars are in general interchange service, helping to lick the hot box problem on all railroads.

Today 61 railroads and private car owners are making the big switch to "Roller Freight". The Timken Roller Bearing Company, Canton 6, Ohio. Cable: "TIMROSCO".



*as of May 1, 1957

TIMKEN
TRADE-MARK REG. U. S. PAT. OFF.

TAPERED ROLLER BEARINGS ROLL THE LOAD